

09/936891.

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| NEWS | 2  | Apr 08 | "Ask CAS" for self-help around the clock                                |
| NEWS | 3  | Apr 09 | BEILSTEIN: Reload and Implementation of a New Subject Area              |
| NEWS | 4  | Apr 09 | ZDB will be removed from STN  |
| NEWS | 5  | Apr 19 | US Patent Applications available in IFICDB, IFIPAT, and IFIUDB          |
| NEWS | 6  | Apr 22 | Records from IP.com available in CAPLUS, HCAPLUS, and ZCAPLUS           |
| NEWS | 7  | Apr 22 | BIOSIS Gene Names now available in TOXCENTER                            |
| NEWS | 8  | Apr 22 | Federal Research in Progress (FEDRIP) now available                     |
| NEWS | 9  | Jun 03 | New e-mail delivery for search results now available                    |
| NEWS | 10 | Jun 10 | MEDLINE Reload  |
| NEWS | 11 | Jun 10 | PCTFULL has been reloaded   |
| NEWS | 12 | Jul 02 | FOREGE no longer contains STANDARDS file segment                        |
| NEWS | 13 | Jul 22 | USAN to be reloaded July 28, 2002;<br>saved answer sets no longer valid |
| NEWS | 14 | Jul 29 | Enhanced polymer searching in REGISTRY                                  |
| NEWS | 15 | Jul 30 | NETFIRST to be removed from STN   |
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| NEWS | 17 | Aug 08 | PHARMAMarketLetter(PHARMAML) - new on STN                               |
| NEWS | 18 | Aug 08 | NTIS has been reloaded and enhanced                                     |
| NEWS | 19 | Aug 19 | Aquatic Toxicity Information Retrieval (AQUIRE)<br>now available on STN |
| NEWS | 20 | Aug 19 | IFIPAT, IFICDB, and IFIUDB have been reloaded                           |
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| NEWS | 27 | Oct 21 | EVENTLINE has been reloaded   |
| NEWS | 28 | Oct 24 | BEILSTEIN adds new search fields  |
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| NEWS | 31 | Nov 18 | DKILIT has been renamed APOLLIT   |
| NEWS | 32 | Nov 25 | More calculated properties added to REGISTRY                            |
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| NEWS | 35 | Dec 17 | PCTFULL now covers WP/PCT Applications from 1978 to date                |
| NEWS | 36 | Dec 17 | TOXCENTER enhanced with additional content                              |
| NEWS | 37 | Dec 17 | Adis Clinical Trials Insight now available on STN                       |
| NEWS | 38 | Dec 30 | ISMEC no longer available   |
| NEWS | 39 | Jan 13 | Indexing added to some pre-1967 records in CA/CAPLUS                    |
| NEWS | 40 | Jan 21 | NUTRACEUT offering one free connect hour in February 2003               |
| NEWS | 41 | Jan 21 | PHARMAML offering one free connect hour in February 2003                |
| NEWS | 42 | Jan 29 | Simultaneous left and right truncation added to COMPENDEX,              |

ENERGY, INSPEC

NEWS 43 Feb 13 CANCERLIT is no longer being updated

NEWS 44 Feb 24 METADEX enhancements

NEWS 45 Feb 24 PCTGEN now available on STN

NEWS 46 Feb 24 TEMA now available on STN

NEWS 47 Feb 26 NTIS now allows simultaneous left and right truncation

NEWS 48 Feb 26 PCTFULL now contains images

NEWS 49 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results

NEWS EXPRESS January 6 CURRENT WINDOWS VERSION IS V6.01a,  
CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),  
AND CURRENT DISCOVER FILE IS DATED 01 OCTOBER 2002

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FILE COVERS 1907 - 18 Mar 2003 VOL 138 ISS 12

FILE LAST UPDATED: 17 Mar 2003 (20030317/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

```

=> s carbohydrate
      110865 CARBOHYDRATE
      120220 CARBOHYDRATES
L1      180226 CARBOHYDRATE
          (CARBOHYDRATE OR CARBOHYDRATES)

=> s cataly?
L2      1119609 CATALY?

=> s metal
      1405202 METAL
      707227 METALS
L3      1703737 METAL
          (METAL OR METALS)

=> s ?polymer? (2a) stabili?
      91341 ?POLYMD
      1776698 ?POLYMER?
      91341 ?POLYMD
      73756 POLYMD
      73756 POLYMD
          (POLYMD)
      32773 ?POLYMG
      26604 POLYMG
      314764 ?POLYMN
      281348 POLYMN
      6946 POLYMNS
      282205 POLYMN
          (POLYMN OR POLYMNS)
      1825054 ?POLYMER?
          (?POLYMER? OR ?POLYMD OR POLYMD OR ?POLYMG OR POLYMG OR ?POLYM
          N OR POLYMN)
      858730 STABILI?
L4      31208 ?POLYMER? (2A) STABILI?

=> s nano?
L5      190600 NANO?

=> s l3 and l4 and l5
L6      89 L3 AND L4 AND L5

=> s l1 and l2 and l6
L7      1 L1 AND L2 AND L6

=> dis l7 bib abs

L7      ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2003 ACS
AN      2000:666737 HCAPLUS
DN      133:254142
TI      Catalytic method for modifying carbohydrates,
      alcohols, aldehydes or polyhydroxy compounds
IN      Capan, Emine; Hahnlein, Marc Sascha; Prusse, Ulf; Vorlop, Klaus-Dieter;
      Haji Begli, Alireza
PA      Sudzucker Aktiengesellschaft, Germany
SO      PCT Int. Appl., 45 pp.
      CODEN: PIXXD2
DT      Patent
LA      German

```

FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE     |
|------|--|------|----------|------------------|----------|
| PI   | WO 2000055165  | A1   | 20000921 | WO 2000-EP2351   | 20000316 |
|      | W: AU, CA, IL, US  |      |          |                  |          |
|      | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                  |          |
|      | DE 19911504  | A1   | 20001019 | DE 1999-19911504 | 19990316 |
|      | EP 1165580   | A1   | 20020102 | EP 2000-925117   | 20000316 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  |      |          |                  |          |
|      | AU 747812  | B2   | 20020523 | AU 2000-43953    | 20000316 |
| PRAI | DE 1999-19911504   | A    | 19990316 |                  |          |
|      | WO 2000-EP2351   | W    | 20000316 |                  |          |

AB Industrial conversion of the title compds. in aq. phase is carried out in the presence of **metal catalysts** consisting of **polymer-stabilized nanoparticles**. A **catalyst** of this type is not deactivated by the conversion reaction as long as the stabilizing interaction between the polymer and the **nanoparticles** is maintained. For example, activity of an Al<sub>2</sub>O<sub>3</sub>-supported, poly(vinylpyrrolidone)-stabilized Pt colloid **catalyst** (prepn. given) in oxidn. of sorbose with O remained unchanged after 10 repeated expts. whereas the activity of a customary Al<sub>2</sub>O<sub>3</sub>-supported Pt **catalyst** decreased to .apprx.35% after 10 runs.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L1 180226 S CARBOHYDRATE  
L2 1119609 S CATALY?  
L3 1703737 S METAL  
L4 31208 S ?POLYMER? (2A) STABILI?  
L5 190600 S NANO?  
L6 89 S L3 AND L4 AND L5  
L7 1 S L1 AND L2 AND L6

=> s ?polymer? (p) stabili?

91341 ?POLYMD  
1776698 ?POLYMER?  
91341 ?POLYMD  
73756 POLYMD  
73756 POLYMD  
(POLYMD)  
32773 ?POLYMG  
26604 POLYMG  
314764 ?POLYMN  
281348 POLYMN  
6946 POLYMNS  
282205 POLYMN  
(POLYMN OR POLYMNS)  
1825054 ?POLYMER?  
(?POLYMER? OR ?POLYMD OR POLYMD OR ?POLYMG OR POLYMG OR ?POLYMN OR POLYMN)  
858730 STABILI?

L8 124653 ?POLYMER? (P) STABILI?

=> s 13 and 18 and 15

L9 306 L3 AND L8 AND L5

=> s 11 and 12 and 19

L10 3 L1 AND L2 AND L9

=> dis l10 1-3 bib abs

L10 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2003 ACS

AN 2000:666737 HCAPLUS

DN 133:254142

TI **Catalytic** method for modifying **carbohydrates**,  
alcohols, aldehydes or polyhydroxy compounds

IN Capan, Emine; Hahnlein, Marc Sascha; Prusse, Ulf; Vorlop, Klaus-Dieter;  
Haji Begli, Alireza

PA Sudzucker Aktiengesellschaft, Germany

SO PCT Int. Appl., 45 pp.

CODEN: PIXXD2

DT Patent

LA German

FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE     |
|------|--|------|----------|------------------|----------|
| PI   | WO 2000055165  | A1   | 20000921 | WO 2000-EP2351   | 20000316 |
|      | W: AU, CA, IL, US  |      |          |                  |          |
|      | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                  |          |
|      | DE 19911504  | A1   | 20001019 | DE 1999-19911504 | 19990316 |
|      | EP 1165580   | A1   | 20020102 | EP 2000-925117   | 20000316 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  |      |          |                  |          |
|      | AU 747812  | B2   | 20020523 | AU 2000-43953    | 20000316 |
| PRAI | DE 1999-19911504   | A    | 19990316 |                  |          |
|      | WO 2000-EP2351   | W    | 20000316 |                  |          |

AB Industrial conversion of the title compds. in aq. phase is carried out in the presence of **metal catalysts** consisting of **polymer-stabilized nanoparticles**. A **catalyst** of this type is not deactivated by the conversion reaction as long as the **stabilizing** interaction between the **polymer** and the **nanoparticles** is maintained. For example, activity of an Al<sub>2</sub>O<sub>3</sub>-supported, poly(vinylpyrrolidone)-**stabilized Pt colloid catalyst** (prepn. given) in oxidn. of sorbose with O remained unchanged after 10 repeated expts. whereas the activity of a customary Al<sub>2</sub>O<sub>3</sub>-supported Pt **catalyst** decreased to .apprx.35% after 10 runs.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L10 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2003 ACS

AN 1999:564336 HCAPLUS

DN 131:287126

TI Polymeric assemblies with **nanostructures**

AU Serizawa, Takeshi

CS Department of Applied Chemistry and Chemical Engineering, Faculty of  
Engineering, Kagoshima University, Korimoto, Kagoshima, 890-0065, Japan

SO Kobunshi Ronbunshu (1999), 56(8), 469-479

CODEN: KBRBA3; ISSN: 0386-2186

PB Kobunshi Gakkai

DT Journal; General Review  
 LA Japanese  
 AB Particle assemblies on ultrathin **polymer** films, and synthesis and applications of core-corona type **polymeric nanospheres** were reviewed with 52 refs. **Polymeric** particles (latex) were electrostatically adsorbed onto the surface of ultrathin **polymer** films, which had been prepd. by an alternate adsorption technique with poly(allylamine hydrochloride) (PAH) and poly(sodium 4-styrenesulfonate) (PSS) in the absence or presence of NaCl. The adsorption processes were quant. analyzed by using quartz crystal microbalance (QCM) and scanning electron microscope (SEM) techniques. Charge densities of films, particle concns., particle sizes, and surface charges of particles significantly affected adsorption. Ordered mono- or multi-layer particle assemblies were obsd. Core-corona type **polymeric nanospheres** were prepd. by the free radical **copolymn.** of hydrophilic macromonomers and hydrophobic comonomers in polar org. solvents. **Polymn.** parameters such as mol. wts. of macromonomer, monomer concns., **polymn.** temps., and solvent species significantly affected particle sizes. Potential applications such as **catalytic** supports and biomedical uses were also studied. **Metal nano-particles** were easily deposited on **nanospheres** due to steric **stabilization** on **nanosphere** surfaces. **Carbohydrates** and proteins were covalently conjugated on **nanospheres**.

L10 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2003 ACS

AN 1950:39533 HCAPLUS

DN 44:39533

OREF 44:7560e-i,7561a-f

TI Textile printing

IN Hall, Wm. P.

PA Joseph Bancroft & Sons Co.

DT Patent

LA Unavailable

FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE |
|----|---|------|----------|-----------------|------|
| PI | US 2488397  |      | 19491115 | US              |      |
| AB | <p>Gray goods are (1) desized, boiled, bleached, and dyed, if desired; (2) sized, if need be, and dried; (3) printed with a thickened resin soln. with or without the addn. of coloring matter, and, what is important, dried to a regain of approx. 10%, leaving a small amt. of moisture in excess of the normal regain of the fabric; (4) friction-glazed or calendered at temps. of from 300.degree. to 450.degree.F. and pressures of from 5 to 75 tons to institute <b>polymerization</b> and impart luster; (5) given addnl. <b>polymerization</b>, if desired, by passing through a curing oven for from 1/2 to 5 min. at temps. of from 340.degree. to 290.degree.F.; and (6) lightly soaped with a synthetic detergent soln. contg. a small quantity of alk. or acid material to neutralize any <b>catalyst</b>, rinsed in water, and dried. The permanent or impermanent sizing imparts to the surface of the fabric uniform frictional characteristics and prevents "chewing" of the cloth in the glazer. Sizing is not required if the printed pattern covers at least 80% of the fabric, or if sizing has been left in the cloth due to incomplete bleaching. A suggested size contains as a stiffening agent yellow dextrin 40, as a friction reducer olein oil 4, and H2O 365 parts by wt. Other sizing materials are casein, albumen, karaya gum, NH4 alginate, sulfonated tallow, lecithin, or fatty amides. A typical printing soln. contains urea-HCHO resin 90, dissolved at room temp. in H2O 120, to which is added as a lubricant 50% sulfonated castor oil 25, as a thickener 6% gum</p> |      |          |                 |      |

tragacanth soln. 100, and a **catalyst**, such as  $\text{NH}_4\text{SCN}$  5 dissolved in  $\text{H}_2\text{O}$  10 parts by wt. Other thickeners are starch or methylcellulose. Condensation products of **carbohydrate**, protein, or polyvinyl alc. with aldehydes may serve not only as thickeners but also as the resin. Other printing resins are aldehyde condensation products of melamine, dicyandiamide, phenol, and acetone. The **catalyst** is chosen to give the proper pH during curing. MeCOMe-HCHO resins cure at pH 10 whereas urea or melamine-HCHO resins cure at pH 4. Printing formulas are (1) dextrinated tapioca starch 600, 37% HCHO 300,  $\text{NH}_4\text{SCN}$  40, 50% olein 50,  $\text{H}_2\text{O}$  150 parts; and (2) ketone-aldehyde resin 100, 6% gum tragacanth soln. 100, polyethylene glycol 10, and the **catalyst**  $\text{K}_2\text{CO}_3$  15 parts. Two types of dyes are used for colored prints on dyed or a undyed grounds. The following is an example of the application of the diazo-developed type (D and D). The fabric is dyed with 2% Diazo Sky Blue BA New to a dull light-blue shade, diazotized with  $\text{NaNO}_2$ ,  $\text{H}_2\text{SO}_4$  using ice, rinsed, dried at a low temp., printed with a paste of 2-naphthol 10,  $\text{NaOH}$  (100.degree. Tw.) 10, MeCOMe-HCHO resin soln. (60.degree.) 350, sulfonated olein 20, a mixt. of karaya and gum tragacanth soln. 300, and  $\text{H}_2\text{O}$  310 parts, and dried to 15%  $\text{H}_2\text{O}$  retention. Coupling of the diazotized blue dye with the 2-naphthol occurs only in the printed portions where the original light-blue shade changes to a new dark-blue pattern. The unprinted portions remain the original dull light-blue shade. The cloth is given 3 runs through a hot glazer and cured for 1 min. at 340.degree.F. The naphthol-type colors usually have better durability to light and washing than the D and D, and the following is an application example. A desized, scoured, and bleached cotton fabric is impregnated at 180.degree.F. in a soln. of Naphthol AS-OL (o-anisidine of 2-hydroxynaphthoic acid) 50,  $\text{NaOH}$  soln. (75.degree. Tw.) 50, 50% olein oil 50,  $\text{NH}_4$  alginate 100 parts, and made up with water to 400 gal. The cloth is dried and then printed with: dimethylolurea 50% solids 155, dimethylolurea 40% solids 50, methylated hexamethylolmelamine resin 80% 40, a soln. of karaya and gum tragacanth 210, 50% olein 20, Fast Red Salt (a **stabilized** diazotized aminoanthraquinone) 22.5, Fast Red Salt 3GL (diazotized chloro-2-nitroaniline) 6.25, and  $\text{H}_2\text{O}$  130 parts. No **catalyst** is used since a satisfactory pH of 4.5 is obtained when curing. The printed cloth is dried to 15% moisture content, glazed 3 times at 325.degree.F., and cured 2 min. at 300.degree.F. The fabric is washed and given a light bleach to whiten the unprinted white backgrounds. The print is a red, clear, sharp, glazed pattern on a white background. Instead of using the more convenient **stabilized** diazo Fast Color Salts, the Fast Color Bases may be diazotized with  $\text{NaNO}_2$ ,  $\text{HCl}$  and using ice in the usual manner, neutralized with  $\text{NaOAc}$ , and added to the resin printing soln. A 3 roll friction glazer is preferred. The only heated roll is the upper, faster rotating steel roll, rotating at a preferred friction ratio of 4:1 on a middle husk roll which, in turn, rotates on a small, bottom, **metal** roll. The fabric is not threaded in the usual manner but passes directly through only the friction nip with the printed face against the fast moving top roll.

=> dis hist

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FILE 'HCAPLUS' ENTERED AT 13:58:38 ON 18 MAR 2003

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L1      180226 S CARBOHYDRATE
L2      1119609 S CATALY?
L3      1703737 S METAL
L4      31208 S ?POLYMER? (2A) STABILI?
L5      190600 S NANO?
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L6            89 S L3 AND L4 AND L5  
 L7            1 S L1 AND L2 AND L6  
 L8           124653 S ?POLYMER? (P) STABILI?  
 L9            306 S L3 AND L8 AND L5  
 L10           3 S L1 AND L2 AND L9

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|  |            |         |
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|  | ENTRY      | SESSION |
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| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL   |
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 NEWS 49 Mar 04 SDI PACKAGE for monthly delivery of multifile SDI results  
  
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 NEWS INTER General Internet Information  
 NEWS LOGIN Welcome Banner and News Items  
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| FULL ESTIMATED COST  | 0.21             | 0.21          |

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FILE LAST UPDATED: 17 Mar 2003 (20030317/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s carbohydrate

110865 CARBOHYDRATE  
120220 CARBOHYDRATES

L1 180226 CARBOHYDRATE  
(CARBOHYDRATE OR CARBOHYDRATES)

=> s cataly?

L2 1119609 CATALY?

=> s ?polymer? (2A) stabili?

91341 ?POLYMD  
1776698 ?POLYMER?  
91341 ?POLYMD  
73756 POLYMD  
73756 POLYMD  
(POLYMD)  
32773 ?POLYMG  
26604 POLYMG  
314764 ?POLYMN  
281348 POLYMN  
6946 POLYMNS  
282205 POLYMN  
(POLYMN OR POLYMNS)  
1825054 ?POLYMER?  
(?POLYMER? OR ?POLYMD OR POLYMD OR ?POLYMG OR POLYMG OR ?POLYMN OR POLYMN)

858730 STABILI?  
L3 31208 ?POLYMER? (2A) STABILI?

=> s metal or platinum or palladium or rhodium or ruthenium or copper or nickel or alloy

1405202 METAL  
707227 METALS  
1703737 METAL  
(METAL OR METALS)  
162577 PLATINUM  
50 PLATINUMS  
162587 PLATINUM  
(PLATINUM OR PLATINUMS)  
128345 PALLADIUM

33 PALLADIUMS  
 128349 PALLADIUM  
     (PALLADIUM OR PALLADIUMS)  
 56930 RHODIUM  
     31 RHODIUMS  
 56932 RHODIUM  
     (RHODIUM OR RHODIUMS)  
 71246 RUTHENIUM  
     20 RUTHENIUMS  
 71246 RUTHENIUM  
     (RUTHENIUM OR RUTHENIUMS)  
 732206 COPPER  
     375 COPPERS  
 732294 COPPER  
     (COPPER OR COPPERS)  
 506773 NICKEL  
     182 NICKELS  
 506820 NICKEL  
     (NICKEL OR NICKELS)  
 580593 ALLOY  
 454827 ALLOYS  
 736158 ALLOY  
     (ALLOY OR ALLOYS)  
 L4 3019679 METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COPPER  
     OR NICKEL OR ALLOY

=> dis hist

(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
 L2 1119609 S CATALY?  
 L3 31208 S ?POLYMER? (2A) STABILI?  
 L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP

=> s l1 and l2 and l3 and l4

L5 2 L1 AND L2 AND L3 AND L4

=> dis l5 1-2 bib abs

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS  
 AN 2000:666737 HCAPLUS  
 DN 133:254142  
 TI Catalytic method for modifying **carbohydrates**,  
     alcohols, aldehydes or polyhydroxy compounds  
 IN Capan, Emine; Hahnlein, Marc Sascha; Prusse, Ulf; Vorlop, Klaus-Dieter;  
     Haji Begli, Alireza  
 PA Sudzucker Aktiengesellschaft, Germany  
 SO PCT Int. Appl., 45 pp.  
     CODEN: PIXXD2  
 DT Patent  
 LA German  
 FAN.CNT 1

|    | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|----|---|------|----------|-----------------|----------|
|    | -----   | ---  | -----    | -----           | -----    |
| PI | WO 2000055165   | A1   | 20000921 | WO 2000-EP2351  | 20000316 |
|    | W: AU, CA, IL, US   |      |          |                 |          |
|    | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |      |          |                 |          |
|    | PT, SE  |      |          |                 |          |

DE 19911504 A1 20001019 DE 1999-19911504 19990316  
EP 1165580 A1 20020102 EP 2000-925117 20000316  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, FI

AU 747812 B2 20020523 AU 2000-43953 20000316

PRAI DE 1999-19911504 A 19990316  
WO 2000-EP2351 W 20000316

AB Industrial conversion of the title compds. in aq. phase is carried out in the presence of **metal catalysts** consisting of **polymer-stabilized** nanoparticles. A **catalyst** of this type is not deactivated by the conversion reaction as long as the stabilizing interaction between the polymer and the nanoparticles is maintained. For example, activity of an Al<sub>2</sub>O<sub>3</sub>-supported, poly(vinylpyrrolidone)-stabilized Pt colloid **catalyst** (prepn. given) in oxidn. of sorbose with O remained unchanged after 10 repeated expts. whereas the activity of a customary Al<sub>2</sub>O<sub>3</sub>-supported Pt **catalyst** decreased to .apprx.35% after 10 runs.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS

AN 1991:647235 HCAPLUS

DN 115:247235

TI Electrochemical detector for liquid-chromatographic analysis of **carbohydrates**

IN Kuwana, Theodore; Marioli, Juan; Zadeii, Javad M.

PA Shimadzu Corp., Japan

SO U.S., 15 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------|------|------|-----------------|------|
|------------|------|------|-----------------|------|

|       |      |       |       |       |
|-------|------|-------|-------|-------|
| ----- | ---- | ----- | ----- | ----- |
|-------|------|-------|-------|-------|

|    |            |   |          |                |          |
|----|------------|---|----------|----------------|----------|
| PI | US 5031449 | A | 19910716 | US 1990-487317 | 19900302 |
|----|------------|---|----------|----------------|----------|

|      |                |  |          |  |  |
|------|----------------|--|----------|--|--|
| PRAI | US 1990-487317 |  | 19900302 |  |  |
|------|----------------|--|----------|--|--|

AB A highly sensitive and selective electrochem. detector, for the liq.-chromatog. anal. of **carbohydrates**, includes Cu particles and Cu particles coated with Cu oxide particles dispersed in a perfluorosulfonate ionomer film which is cast onto the surface of a glassy C electrode. The Cu is electrochem. dispersed into the perfluorosulfonate ionomer by a const. potential method. The response of the detector is based on the electrolytic generation of a higher oxidn. state species of Cu **catalytically** oxidizing **carbohydrates** in alk. solns. at a pH >13. The controlled electrodeposition of **metal** into the **polymer** achieves mech. **stability** and improved selectivity. The kinetic limitation is overcome by a **catalytic** process which substantially lowers the overpotential for the oxidn. reaction. Diabetes monitoring is a possibility.

=> dis hist

(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE

L2 1119609 S CATALY?

L3 31208 S ?POLYMER? (2A) STABILI?

L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP

L5 2 S L1 AND L2 AND L3 AND L4

=> log h

| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| FULL ESTIMATED COST                        | 25.12            | 25.33         |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE                        | -1.30            | -1.30         |

SESSION WILL BE HELD FOR 60 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 14:27:18 ON 18 MAR 2003

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1623kxg

PASSWORD:

\* \* \* \* \* RECONNECTED TO STN INTERNATIONAL \* \* \* \* \*  
SESSION RESUMED IN FILE 'HCAPLUS' AT 14:37:09 ON 18 MAR 2003  
FILE 'HCAPLUS' ENTERED AT 14:37:09 ON 18 MAR 2003  
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

| COST IN U.S. DOLLARS                       | SINCE FILE ENTRY | TOTAL SESSION |
|--|------------------|---------------|
| FULL ESTIMATED COST                        | 25.12            | 25.33         |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE ENTRY | TOTAL SESSION |
| CA SUBSCRIBER PRICE                        | -1.30            | -1.30         |

=> dis hist

(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
L2 1119609 S CATALY?  
L3 31208 S ?POLYMER? (2A) STABILI?  
L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP  
L5 2 S L1 AND L2 AND L3 AND L4

=> s pt or pd or rh or ru or cu or ni or l4

210647 PT  
3942 PTS  
213821 PT  
(PT OR PTS)  
159750 PD  
1755 PDS  
161200 PD  
(PD OR PDS)  
79540 RH  
316 RHS  
79730 RH

```

                (RH OR RHS)
55214 RU
    170 RUS
55362 RU
                (RU OR RUS)
728518 CU
    4447 CUS
730416 CU
                (CU OR CUS)
546734 NI
    3345 NIS
548694 NI
                (NI OR NIS)
L6      3426702 PT OR PD OR RH OR RU OR CU OR NI OR L4
    95% OF LIMIT FOR TOTAL ANSWERS REACHED

```

```

=> s l2 and l6
SYSTEM LIMITS EXCEEDED - SEARCH ENDED
The search profile you entered was too complex or gave too many
answers. Simplify or subdivide the query and try again. If you have
exceeded the answer limit, enter DELETE HISTORY at an arrow prompt
(=>) to remove all previous answers sets and begin at L1. Use the
SAVE command to store any important profiles or answer sets before
using DELETE HISTORY.

```

```

=> del l6
DELETE L6? (Y)/N:y

```

```

=> s (pt or pd or rh or ru or cu or ni or l4) and cataly?
    210647 PT
    3942 PTS
    213821 PT
                (PT OR PTS)
    159750 PD
    1755 PDS
    161200 PD
                (PD OR PDS)
    79540 RH
    316 RHS
    79730 RH
                (RH OR RHS)
    55214 RU
    170 RUS
    55362 RU
                (RU OR RUS)
    728518 CU
    4447 CUS
    730416 CU
                (CU OR CUS)
    546734 NI
    3345 NIS
    548694 NI
                (NI OR NIS)
    1119609 CATALY?
L6      376091 (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?

```

```

=> s l6 and l1
L7      1235 L6 AND L1

```

```

=> s l6 (P) l1

```

PROXIMITY OPERATOR LEVEL NOT CONSISTENT WITH  
FIELD CODE - 'AND' OPERATOR ASSUMED 'L6 (P) L1'  
L8 1235 L6 (P) L1

=> s (pt or pd or rh or ru or cu or ni or l4) (P) cataly?

210647 PT  
3942 PTS  
213821 PT  
(PT OR PTS)  
159750 PD  
1755 PDS  
161200 PD  
(PD OR PDS)  
79540 RH  
316 RHS  
79730 RH  
(RH OR RHS)  
55214 RU  
170 RUS  
55362 RU  
(RU OR RUS)  
728518 CU  
4447 CUS  
730416 CU  
(CU OR CUS)  
546734 NI  
3345 NIS  
548694 NI  
(NI OR NIS)

1119609 CATALY?

L9 351208 (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?

=> s l9 (P) l1

L10 705 L9 (P) L1

=> d scan

L10 705 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

CC 7-5 (Enzymes)

Section cross-reference(s): 75

TI Crystal structure of lactose synthase reveals a large conformational  
change in its catalytic component, the .beta.1,4-galactosyltransferase-I  
ST lactose synthase crystal structure acetylglucosamine galactosyltransferase  
conformational change; lactalbumin alpha role lactose synthase mechanism  
crystal structure  
IT Enzyme functional sites  
(active; of lactose synthase)  
IT Crystal growth  
Crystal structure  
(of lactose synthase-ligand complexes)  
IT Conformational transition  
(protein; crystal structure of lactose synthase reveals a large  
substrate-induced conformational change in acetylglucosamine  
galactosyltransferase)  
IT Conformation  
(protein; of lactose synthase-ligand complexes)  
IT Lactalbumins  
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL  
(Biological study); PROC (Process)  
(.alpha.-; crystallog. study of role of .alpha.-lactalbumin in lactose

synthase mechanism)

IT 9054-94-8, Acetylglucosamine .beta.-1,4-galactosyltransferase  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (crystal structure of lactose synthase reveals a large  
 substrate-induced conformational change in acetylglucosamine  
 galactosyltransferase)

IT 9030-11-9, Lactose synthase  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); PEP (Physical, engineering or chemical process); PRP  
 (Properties); BIOL (Biological study); PROC (Process)  
 (crystal structure of lactose synthase reveals a large  
 substrate-induced conformational change in acetylglucosamine  
 galactosyltransferase and the role of .alpha.-lactalbumin in the enzyme  
 mechanism)

IT 50-99-7D, D-Glucose, complexes with lactose synthase, properties  
 2956-16-3D, UDP-galactose, complexes with lactose synthase 7439-96-5D,  
 Manganese, complexes with lactose synthase, properties 7512-17-6D,  
 N-Acetylglucosamine, complexes with lactose synthase 9030-11-9D, Lactose  
 synthase, complexes with ligands  
 RL: PEP (Physical, engineering or chemical process); PRP (Properties);  
 PROC (Process)  
 (crystal structure of lactose synthase-ligand complexes)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L10 705 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM C07J009-00  
 CC 32-7 (Steroids)  
 Section cross-reference(s): 48, 63  
 TI Method for producing stanols  
 ST sterol hydrogenation; stanol prepn  
 IT Hydrogenation  
 (method for producing stanols)

IT Sterols  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (method for producing stanols)

IT Sterols  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (soya; method for producing stanols)

IT Sterols  
 RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP  
 (Preparation)  
 (stanols; method for producing stanols)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L10 705 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 TI Preparation of carbon-supported metal catalysts for hydrogenation and  
 oxidation reactions in liquid phase processes

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L10 705 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 CC 80-2 (Organic Analytical Chemistry)  
 Section cross-reference(s): 33, 72  
 TI Nickel-Titanium Alloy Electrode as a Sensitive and Stable LCEC Detector  
 for Carbohydrates  
 ST nickel titanium alloy electrode detector LC; carbohydrate LC nickel  
 titanium electrode detector; liq chromatog carbohydrate amperometric  
 detection



IT Chromatography, column and liquid  
(carbohydrates detn. by, nickel-titanium alloy electrode for  
amperometric detection in)

IT Carbohydrates and Sugars, analysis  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, nickel-titanium alloy electrode for amperometric detection  
in liq. chromatog.)

IT Electrodes  
(nickel-titanium alloy, for amperometric detection of carbohydrates in  
liq. chromatog.)

IT 50-69-1, Ribose 50-99-7, Glucose, analysis 57-50-1, Sucrose, analysis  
69-79-4, Maltose 99-20-7, Trehalose 147-81-9, Arabinose 470-55-3,  
Stachyose 528-50-7, Cellobiose 597-12-6, Melezitose  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, nickel-titanium alloy electrode for amperometric detection  
in liq. chromatog.)

IT 11110-85-3  
RL: ANST (Analytical study)  
(electrode, for amperometric detection of carbohydrates in liq.  
chromatog.)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

=> d his 5

(FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003)

L6 376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?  
L7 1235 S L6 AND L1  
L8 1235 S L6 (P) L1  
L9 351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?  
L10 705 S L9 (P) L1

=> d his

(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
L2 1119609 S CATALY?  
L3 31208 S ?POLYMER? (2A) STABILI?  
L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP  
L5 2 S L1 AND L2 AND L3 AND L4  
L6 376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?  
L7 1235 S L6 AND L1  
L8 1235 S L6 (P) L1  
L9 351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?  
L10 705 S L9 (P) L1

=> s 18 and polymer

882906 POLYMER  
744662 POLYMERS  
1204520 POLYMER

(POLYMER OR POLYMERS)

L11 88 L8 AND POLYMER

=> d scan

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

CC 21-0 (General Organic Chemistry)

TI From olefin cyclopropanation to olefin metathesis through catalyst

engineering: recent applications of olefin metathesis to fine organic synthesis and to **polymer** chemistry

ST olefin cyclopropanation metathesis **catalyst** review

IT Cyclopropanation  
Cyclopropanation **catalysts**  
Metathesis  
Metathesis **catalysts**  
(**catalytic** olefin cyclopropanation and olefin metathesis)

IT Alkenes, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(**catalytic** olefin cyclopropanation and olefin metathesis)

IT 7440-16-6D, **Rhodium**, complexes, uses 7440-18-8D,  
**Ruthenium**, complexes, uses  
RL: CAT (Catalyst use); USES (Uses)  
(**catalytic** olefin cyclopropanation and olefin metathesis)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C08L003-02

NCL 524014000

CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 43, 44

TI Thermosetting adhesive resins

ST thermosetting adhesive wood **carbohydrate** copolymer; sugar copolymer urea phenol adhesive; starch copolymer urea phenol adhesive; phenol **carbohydrate** copolymer wood adhesive; urea **carbohydrate** copolymer wood adhesive; cupric sulfate polymn **catalyst**; phthalic anhydride copolymer resin; whey permeate urea copolymer thermosetting; particleboard thermosetting resin binder

IT Phenolic resins, uses and miscellaneous  
RL: USES (Uses)  
(phenol **polymers** with sugars or starches, adhesives and binders for wood products)

IT Crosslinking agents  
(phenols and urea, for sugars or starch)

IT Molasses  
(**polymers** with phenols or urea and org. acid anhydrides, thermosetting adhesives and binders, for wood products)

IT Anhydrides  
RL: USES (Uses)  
(**polymers** with sugars or starch and urea or phenols, thermosetting adhesives and binders, for wood products)

IT **Carbohydrates** and Sugars, compounds  
RL: USES (Uses)  
(**polymers** with urea or phenols and acid anhydrides, adhesives and binders, for wood products)

IT Whey  
(sol. **carbohydrates** from, **polymers** with phenols or urea and org. acid anhydrides, thermosetting adhesives and binders, for wood products)

IT Adhesives  
Binding materials  
(thermosetting **polymers** of urea or phenols with sugars or starches and acid anhydrides, for wood products)

IT Aminoplasts  
RL: USES (Uses)  
(urea **polymers** with sugars or starches, adhesives and binders for wood products)

IT Building materials

(particleboards, binders for, sugar or starch-based thermosetting resins as)

IT 7758-98-7, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for polymn. of sugars with urea or phenols)

IT 6484-52-2, uses and miscellaneous  
 RL: USES (Uses)  
 (polymn. in presence of, of whey permeate with urea, fungus-resistant wood adhesives manufd. by)

IT 50-99-7D, **polymers** with phenols or urea and org. acid anhydrides  
 57-13-6D, **polymers** with sugars or starch and carboxylic acid anhydrides 57-50-1D, **polymers** with phenols or urea and org. acid anhydrides 59-23-4D, **polymers** with phenols or urea and org. acid anhydrides 63-42-3D, **polymers** with phenols or urea and org. acid anhydrides 69-79-4D, **polymers** with phenols or urea and org. acid anhydrides 85-44-9D, **polymers** with sugars or starch and urea or phenols 108-31-6D, **polymers** with sugars or starch and urea or phenols 108-46-3D, **polymers** with sugars or starch and carboxylic acid anhydrides 9004-53-9D, **polymers** with phenols or urea and org. acid anhydrides 9005-82-7D, **polymers** with phenols or urea and org. acid anhydrides 9006-26-2D, **polymers** with sugars or starch and urea or phenols 9037-22-3  
 RL: USES (Uses)  
 (thermosetting adhesives and binders, for wood products)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM C08F012-08  
 ICS C08F004-64  
 CC 35-3 (Chemistry of Synthetic High Polymers)  
 Section cross-reference(s): 33, 67  
 TI Saccharide-transition **metal** compound **catalysts** for polymerization of styrene and manufacture of styrene **polymers** using them  
 ST transition **metal** compd **catalyst** polymn styrene; metallocene polymn **catalyst** syndiotactic polystyrene prepn; syndiotactic polystyrene manuf saccharide transition **metal catalyst**  
 IT Polymerization **catalysts**  
 (metallocene; saccharide-transition **metal** compd. polymn. **catalysts** for manuf. of syndiotactic polystyrene)  
 IT **Carbohydrates**, uses  
 Monosaccharides  
 Oligosaccharides, uses  
 Polysaccharides, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (reaction products with **metal** compds.; saccharide-transition **metal** compd. polymn. **catalysts** for manuf. of syndiotactic polystyrene)  
 IT Polymerization **catalysts**  
 (stereospecific; saccharide-transition **metal** compd. polymn. **catalysts** for manuf. of syndiotactic polystyrene)  
 IT 998-00-5, Tetraisobutyl aluminoxane 177794-75-1, Octahydrofluorenyltitanium trimethoxide  
 RL: CAT (Catalyst use); USES (Uses)  
 (saccharide-transition **metal** compd. polymn. **catalysts** for manuf. of syndiotactic polystyrene)  
 IT 100-99-2DP, Triisobutylaluminum, reaction products with fucose

2438-80-4DP, L-Fucose, reaction products with triisobutylaluminum  
RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);  
USES (Uses)

(saccharide-transition **metal** compd. polymn. **catalysts**  
for manuf. of syndiotactic polystyrene)

IT 28325-75-9P, Syndiotactic polystyrene  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(saccharide-transition **metal** compd. polymn. **catalysts**  
for manuf. of syndiotactic polystyrene)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C08G077-38

ICS G02B001-04; G02C007-04; B29D011-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 39

TI Silicone rubbers grafted with saccharides for contact lenses

ST silicone saccharide graft elastomer contact lens

IT Rubber, silicone, biological studies

RL: BIOL (Biological study)

(saccharide-graft, for contact lenses)

IT **Carbohydrates** and Sugars, compounds

RL: BIOL (Biological study)

(compds., with silicone rubber, for contact lenses)

IT Lenses

(contact, silicone rubbers grafted with saccharides as)

IT 50-99-7D, Glucose, reaction products with silicone rubber 57-48-7D,  
Fructose, grafts with silicone rubbers 57-50-1D, Saccharose, grafts with  
silicone rubbers 59-23-4D, Galactose, grafts with silicone rubbers  
63-42-3D, Lactose, grafts with silicone rubbers 69-79-4D, Maltose,  
grafts with silicone rubbers 131-48-6D, grafts with silicone rubbers  
499-14-9D, Chondrosine, grafts with silicone rubbers 528-50-7D,  
Cellobiose, grafts with silicone rubbers 556-67-2D, copolymers with  
silicone rubbers and saccharide, graft 685-73-4D, Galacturonic acid,  
grafts with silicone rubbers 1811-31-0D, N-Acetylglactosamine, grafts  
with silicone rubbers 2554-06-5D, copolymers with silicone rubbers and  
saccharide, graft 3416-24-8D, Glucosamine, grafts with silicone rubbers  
3458-28-4D, Mannose, grafts with silicone rubbers 6556-12-3D,  
D-Glucuronic acid, grafts with silicone rubbers 7512-17-6D,  
N-Acetylglucosamine, grafts with silicone rubbers 7535-00-4D, grafts  
with silicone rubbers 9004-61-9D, Hyaluronic acid, grafts with silicone  
rubbers 9005-25-8D, Starch, grafts with silicone rubbers 9005-32-7D,  
Alginic acid, grafts with silicone rubbers 29031-19-4D, Glucosamine  
sulfate, grafts with silicone rubbers 31022-50-1, N-Acetylglactosamine  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(contact lens manuf. with)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C12Q001-68

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 36

TI Active and biocompatible platforms prepared by polymerization of surface  
coating films

ST biochip copolymer polymn coating film sepn HPLC capillary electrophoresis

IT Acoustic devices

Alkyl groups

Animal cell

Biochemical molecules  
Biotechnology  
Capillary electrochromatography  
Capillary electrophoresis  
Ceramics  
Coating materials  
Electromagnetic wave  
Electromagnetism  
Films  
HPLC  
Hydrogen bond  
Hydrophilicity  
Hydrophobicity  
Injectors  
Laser radiation  
Magnetic materials  
Microarray technology  
Polymerization  
Sensors  
Separation  
UV radiation  
Washing

(active and biocompatible platforms prepd. by polymn. of surface coating films)

IT Antigens

Ligands

RL: ANT (Analyte); ANST (Analytical study)

(active and biocompatible platforms prepd. by polymn. of surface coating films)

IT Nucleic acids

Proteins

RL: ANT (Analyte); ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(active and biocompatible platforms prepd. by polymn. of surface coating films)

IT Antibodies

**Carbohydrates**, uses

Lipids, uses

Peptides, uses

Receptors

RL: ARG (Analytical reagent use); DEV (Device component use); ANST (Analytical study); USES (Uses)

(active and biocompatible platforms prepd. by polymn. of surface coating films)

IT Acrylic **polymers**, uses

Fluoropolymers, uses

Glass, uses

**Metals**, uses

Oxides (inorganic), uses

Plastics, uses

Polyimides, uses

Polyoxyalkylenes, uses

Polysaccharides, uses

Polysiloxanes, uses

Polyurethanes, uses

RL: DEV (Device component use); USES (Uses)

(active and biocompatible platforms prepd. by polymn. of surface coating films)

IT Epoxides

Macromonomers

## Monomers

### **Polymers, uses**

RL: DEV (Device component use); PRP (Properties); USES (Uses)  
(active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Reagents

RL: NUU (Other use, unclassified); USES (Uses)  
(active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Functional groups

(chalone, **polymers** with; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Functional groups

(charged; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT **Polymers, uses**

RL: DEV (Device component use); USES (Uses)  
(co-; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Silicone rubber, reactions

RL: DEV (Device component use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
(di-Me; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Electricity

(electrostatics; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Bond

(ionic; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Coating materials

(masking; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT DNA

RL: PRP (Properties); RCT (Reactant); RACT (Reactant or reagent)  
(oligo, with terminal amino groups; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT **Catalysts**

(photo-; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Polyamides, uses

RL: DEV (Device component use); USES (Uses)  
(poly(amino acids); active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Ketones, properties

RL: PRP (Properties)  
(**polymers** of pendant .alpha...beta. unsatd.; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT Molecules

(small; active and biocompatible platforms prepd. by polymn. of surface coating films)

### IT **Catalysts**

(thermal; active and biocompatible platforms prepd. by polymn. of surface coating films)

IT 7440-21-3, Polysilicon, uses 7440-44-0, Carbon, uses 9002-84-0, PTFE  
9002-89-5, Polyvinyl alcohol 9003-05-8 9003-39-8, Polyvinylpyrrolidone  
9003-53-6, Polystyrene 9011-14-7, PMMA 12033-89-5, Silicon nitride,  
uses 25014-12-4, Polymethacrylamide 25322-68-3, Polyethylene glycol  
RL: DEV (Device component use); USES (Uses)  
(active and biocompatible platforms prepd. by polymn. of surface

coating films)

IT 79-10-7D, Acrylic acid, **polymers** 79-41-4D, Methacrylic acid, **polymers** 100-42-5D, Vinylbenzene, **polymers** 2669-89-8D, Vinyl, **polymers** 4151-45-5D, Cinnamate, **polymers** 7631-86-9, Silica, uses  
 RL: DEV (Device component use); PRP (Properties); USES (Uses)  
 (active and biocompatible platforms prepd. by polymn. of surface coating films)

IT 221273-01-4, SU 8  
 RL: DEV (Device component use); PRP (Properties); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
 (active and biocompatible platforms prepd. by polymn. of surface coating films)

IT 14808-60-7, Quartz, reactions  
 RL: DEV (Device component use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
 (active and biocompatible platforms prepd. by polymn. of surface coating films)

IT 84-65-1, Anthraquinone 119-61-9, Benzophenone, uses 2124-31-4, p-Dimethylaminoacetophenone 6175-45-7, Diethoxyacetophenone 13840-40-9D, Phosphineoxide, acyl derivs. 24650-42-8, 2,2-Dimethoxy-2-phenyl acetophenone 106797-53-9 162881-26-7  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (active and biocompatible platforms prepd. by polymn. of surface coating films)

IT 9003-06-9, Poly(acrylamide/acrylic acid) 25952-53-8, 1-Ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride 72607-53-5, N-(3-Aminopropyl)methacrylamide hydrochloride 82436-77-9, Bis(sulfosuccinimidyl)suberate  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (active and biocompatible platforms prepd. by polymn. of surface coating films)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C07F017-00  
 ICS C08F010-00

CC 29-10 (Organometallic and Organometalloidal Compounds)  
 Section cross-reference(s): 67

TI Polynuclear metallocene compound, process for preparing it and its use as **catalyst**

ST olefin polymn **catalyst** polynuclear metallocene; polynuclear metallocene prepn olefin polymn **catalyst**

IT Polymerization  
 (of olefins as **catalyzed** by polynuclear metallocene compds.)

IT Polymerization **catalysts**  
 (process for prepg. polynuclear metallocene compds. for use as **catalyst**)

IT Group IVB elements  
 Group VB elements  
 Group VIB elements  
 Sandwich compounds  
 RL: CAT (Catalyst use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)  
 (process for prepg. polynuclear metallocene compds. for use as **catalyst**)

IT 183987-05-5P 183987-06-6P  
 RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)

(prepn. as **catalyst** for olefin polymn.)

IT 183987-09-9 183987-10-2  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with (cyclopentadienylidene)dichlorozirconium complex)

IT 183987-07-7 183987-08-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with (indenylidene)dichlorozirconium complex)

IT 28875-08-3  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction with zirconium metallocene complexes to give polynuclear metallocenes)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L11 88 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC C07D  
 CC 35 (Synthetic High Polymers)  
 TI **Carbohydrate-derived polymers**  
 ST METHACRYLATES GALACTOSE **POLYMERS**; **POLYMERS** GALACTOSE  
 ACRYLATES; GALACTOSE ACRYLATES **POLYMERS**; ACRYLATES GALACTOSE  
**POLYMERS**

IT 29989-76-2P 29989-78-4P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (manuf. of, and derivs. thereof)

IT 2715-36-8P 4064-06-6P 14200-74-9P 28826-28-0P 29989-77-3P  
 RL: PREP (Preparation)  
 (prepn. of)

IT 59-23-4  
 RL: USES (Uses)  
 (reaction products with ketones, and **polymers** therefrom)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):0

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(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
 L2 1119609 S CATALY?  
 L3 31208 S ?POLYMER? (2A) STABILI?  
 L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP  
 L5 2 S L1 AND L2 AND L3 AND L4  
 L6 376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?  
 L7 1235 S L6 AND L1  
 L8 1235 S L6 (P) L1  
 L9 351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?  
 L10 705 S L9 (P) L1  
 L11 88 S L8 AND POLYMER

=> d l5 ti tot

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS  
 TI **Catalytic** method for modifying **carbohydrates**,  
 alcohols, aldehydes or polyhydroxy compounds

L5 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS  
 TI Electrochemical detector for liquid-chromatographic analysis of  
**carbohydrates**



=> d bib ind 1

L11 ANSWER 1 OF 88 HCAPLUS COPYRIGHT 2003 ACS  
AN 2003:192849 HCAPLUS  
TI Green chemistry: principles, aims and selected achievements  
AU Burczyk, Bogdan  
CS Inst. Technol. Org. i Tworzyw Sztucznych, Politech. Wroclawska, Wroclaw,  
50-370, Pol.  
SO Wiadomosci Chemiczne (2002), 56(9-10), 709-770  
CODEN: WICHAP; ISSN: 0043-5104  
PB Wydawnictwo Uniwersytetu Wroclawskiego Sp. z o.o.  
DT Journal  
LA Polish  
CC 48 (Unit Operations and Processes)

=> d bib ind 1 15

L5 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS  
AN 2000:666737 HCAPLUS  
DN 133:254142  
TI **Catalytic** method for modifying **carbohydrates**,  
alcohols, aldehydes or polyhydroxy compounds  
IN Capan, Emine; Hahnlein, Marc Sascha; Prusse, Ulf; Vorlop, Klaus-Dieter;  
Haji Begli, Alireza  
PA Sudzucker Aktiengesellschaft, Germany  
SO PCT Int. Appl., 45 pp.  
CODEN: PIXXD2  
DT Patent  
LA German  
FAN.CNT 1

|      | PATENT NO.   | KIND | DATE     | APPLICATION NO.  | DATE     |
|------|--|------|----------|------------------|----------|
|      | -----  | ---  | -----    | -----            | -----    |
| PI   | WO 2000055165  | A1   | 20000921 | WO 2000-EP2351   | 20000316 |
|      | W: AU, CA, IL, US  |      |          |                  |          |
|      | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE   |      |          |                  |          |
|      | DE 19911504  | A1   | 20001019 | DE 1999-19911504 | 19990316 |
|      | EP 1165580   | A1   | 20020102 | EP 2000-925117   | 20000316 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  |      |          |                  |          |
|      | AU 747812  | B2   | 20020523 | AU 2000-43953    | 20000316 |
| PRAI | DE 1999-19911504   | A    | 19990316 |                  |          |
|      | WO 2000-EP2351   | W    | 20000316 |                  |          |
| IC   | ICM C07H015-00   |      |          |                  |          |
| CC   | 44-4 (Industrial Carbohydrates)  |      |          |                  |          |
|      | Section cross-reference(s): 67   |      |          |                  |          |
| ST   | <b>carbohydrate</b> oxidn <b>platinum</b> nanoparticle <b>catalyst</b> ; polyvinylpyrrolidone stabilized <b>platinum</b> colloid <b>catalyst</b> sorbose oxidn |      |          |                  |          |
| IT   | Nanoparticles  |      |          |                  |          |
|      | Oxidation  |      |          |                  |          |
|      | Oxidation <b>catalysts</b>   |      |          |                  |          |
|      | (chem. conversion of <b>carbohydrates</b> , alcs., aldehydes or polyhydroxy compds. in presence of <b>polymer-stabilized metal nanoparticle catalysts</b> )    |      |          |                  |          |
| IT   | Alcohols, processes  |      |          |                  |          |
|      | Aldehydes, processes   |      |          |                  |          |
|      | <b>Carbohydrates</b> , processes   |      |          |                  |          |

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT Alcohols, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (polyhydric; chem. conversion of **carbohydrates**, alcs.,  
 aldehydes or polyhydroxy compds. in presence of **polymer-  
 stabilized metal nanoparticle catalysts**)

IT 9003-39-8, Poly(vinylpyrrolidone)  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **metal nanoparticle  
 catalysts** stabilized with)

IT 7440-02-0, **Nickel**, uses 7440-05-3, **Palladium**, uses  
 7440-16-6, **Rhodium**, uses 7440-18-8, **Ruthenium**, uses  
 7440-50-8, **Copper**, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 7782-44-7, Oxygen, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 57-48-7, Fructose, processes 58-86-6, Xylose, processes 63-42-3,  
 Lactose 69-79-4, Maltose 499-40-1, Isomaltose 51411-23-5,  
 Trehalulose  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 133634-68-1P 133634-69-2P 150787-99-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 7440-06-4, **Platinum**, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (nanoparticles; chem. conversion of **carbohydrates**, alcs.,  
 aldehydes or polyhydroxy compds. in presence of **polymer-  
 stabilized metal nanoparticle catalysts**)

IT 50-99-7, Glucose, reactions 57-50-1, Saccharose, reactions 87-79-6,  
 Sorbose  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidn.; chem. conversion of **carbohydrates**, alcs., aldehydes  
 or polyhydroxy compds. in presence of **polymer-  
 stabilized metal nanoparticle catalysts**)

IT 124-22-1, Dodecylamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination of isomaltulose; chem. conversion of  
**carbohydrates**, alcs., aldehydes or polyhydroxy compds. in  
 presence of **polymer-stabilized metal  
 nanoparticle catalysts**)

IT 13718-94-0, Isomaltulose  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination with dodecylamine; chem. conversion of  
**carbohydrates**, alcs., aldehydes or polyhydroxy compds. in  
 presence of **polymer-stabilized metal**

## nanoparticle catalysts)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=&gt; e carbohydrates/ct

| E#  | FREQUENCY | AT  | TERM   |
|-----|-----------|-----|--|
| E1  | 0         | 1   | CARBOHYDRATE-TRANSPORTING/CT                 |
| E2  | 0         | 2   | CARBOHYDRATE-TRANSPORTING PROTEINS/CT        |
| E3  | 44850     | 757 | --> CARBOHYDRATES/CT                         |
| E4  | 0         | 6   | CARBOHYDRATES (L) ACIDIC/CT                  |
| E5  | 0         | 6   | CARBOHYDRATES (L) ALDONIC ACIDS/CT           |
| E6  | 0         | 7   | CARBOHYDRATES (L) ALDONIC ACIDS, LACTONES/CT |
| E7  | 0         | 7   | CARBOHYDRATES (L) ALDOSES/CT                 |
| E8  | 0         | 8   | CARBOHYDRATES (L) ALK. EARTH COMPLEXES/CT    |
| E9  | 0         | 5   | CARBOHYDRATES (L) AMADORI COMPS./CT          |
| E10 | 0         | 8   | CARBOHYDRATES (L) AMINO SUGARS/CT            |
| E11 | 0         | 5   | CARBOHYDRATES (L) COMPLEXES/CT               |
| E12 | 0         | 8   | CARBOHYDRATES (L) DEOXY/CT                   |

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|     |   |   |  |
|-----|---|---|--|
| E13 | 0 | 4 | CARBOHYDRATES (L) FUCOSIDOSIS/CT         |
| E14 | 0 | 5 | CARBOHYDRATES (L) GLYICALS/CT            |
| E15 | 0 | 7 | CARBOHYDRATES (L) GLYCOSYLAMINES/CT      |
| E16 | 0 | 5 | CARBOHYDRATES (L) HEPTOSES/CT            |
| E17 | 0 | 5 | CARBOHYDRATES (L) HEXITOLS/CT            |
| E18 | 0 | 5 | CARBOHYDRATES (L) HYDRAZONES/CT          |
| E19 | 0 | 6 | CARBOHYDRATES (L) KETOSES/CT             |
| E20 | 0 | 5 | CARBOHYDRATES (L) LACTAMS/CT             |
| E21 | 0 | 5 | CARBOHYDRATES (L) MACROCYCLIC/CT         |
| E22 | 0 | 4 | CARBOHYDRATES (L) MASSECUITE/CT          |
| E23 | 0 | 4 | CARBOHYDRATES (L) METAB./CT              |
| E24 | 0 | 6 | CARBOHYDRATES (L) METABOLIC DISORDERS/CT |

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|     |       |   |   |
|-----|-------|---|---|
| E25 | 0     | 5 | CARBOHYDRATES (L) METASACCHARINIC ACIDS/CT      |
| E26 | 0     | 6 | CARBOHYDRATES (L) NEUTRAL SUGARS/CT             |
| E27 | 0     | 6 | CARBOHYDRATES (L) NONREDUCING/CT                |
| E28 | 0     | 5 | CARBOHYDRATES (L) REACTION PRODUCTS/CT          |
| E29 | 0     | 6 | CARBOHYDRATES (L) REDUCING SUGARS/CT            |
| E30 | 0     | 7 | CARBOHYDRATES (L) SUGAR ESTERS/CT               |
| E31 | 0     | 7 | CARBOHYDRATES (L) SUGAR PHOSPHATES/CT           |
| E32 | 0     | 6 | CARBOHYDRATES (L) SULFATES/CT                   |
| E33 | 0     | 9 | CARBOHYDRATES (L) TRANSITION METAL COMPLEXES/CT |
| E34 | 0     | 5 | CARBOHYDRATES (L) TRIOSE PHOSPHATES/CT          |
| E35 | 0     | 5 | CARBOHYDRATES (L) TRIOSSES/CT                   |
| E36 | 42799 | 2 | CARBOHYDRATES AND SUGARS/CT                     |

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|     |   |   |  |
|-----|---|---|--|
| E37 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ACIDIC/CT                               |
| E38 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDITOLS/CT                             |
| E39 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDITOLS, ESTERS/CT                     |
| E40 | 0 | 3 | CARBOHYDRATES AND SUGARS (L) ALDITOLS, RARE EARTH METAL COMPLEXES/CT |
| E41 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDONIC ACIDS/CT                        |
| E42 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDONIC ACIDS, LACTONES/CT              |
| E43 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDONOLACTONES/CT                       |
| E44 | 0 | 2 | CARBOHYDRATES AND SUGARS (L) ALDOSES/CT                              |

|      |       |   |  |
|------|-------|---|--|
| E45  | 0     | 3 | CARBOHYDRATES AND SUGARS (L) ALK. EARTH COMPLEXES/CT               |
| E46  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) AMADORI COMPDs./CT                    |
| E47  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) AMINODEOXY/CT                         |
| E48  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) COMPLEXES/CT                          |
| => e |       |   |  |
| E49  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) CONJUGATES/CT                         |
| E50  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) CONJUGATES, SIALIC ACID-C<br>ONTG./CT |
| E51  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) DEOXY/CT                              |
| E52  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) ESTERS/CT                             |
| E53  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) GLYCALs/CT                            |
| E54  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) GLYCOSYLAMINES/CT                     |
| E55  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) HEPTOSES/CT                           |
| E56  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) HEXITOLS/CT                           |
| E57  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) HEXITOLS, ANHYDRO/CT                  |
| E58  | 0     | 3 | CARBOHYDRATES AND SUGARS (L) HYDRAZONES/CT                         |
| E59  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) KETOSES/CT                            |
| E60  | 0     | 3 | CARBOHYDRATES AND SUGARS (L) LACTAMS/CT                            |
| => e |       |   |  |
| E61  | 0     | 3 | CARBOHYDRATES AND SUGARS (L) MACROCYCLIC/CT                        |
| E62  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) METABOLIC DISORDERS/CT                |
| E63  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) METASACCHARINIC ACIDS/CT              |
| E64  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) NEUTRAL/CT                            |
| E65  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) NONREDUCING/CT                        |
| E66  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) PHOSPHATES/CT                         |
| E67  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) REACTION PRODUCTS/CT                  |
| E68  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) REDUCING/CT                           |
| E69  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) SULFATES/CT                           |
| E70  | 0     | 3 | CARBOHYDRATES AND SUGARS (L) TRANSITION METAL COMPLEXE<br>S/CT     |
| E71  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) TRIOSSES/CT                           |
| E72  | 0     | 2 | CARBOHYDRATES AND SUGARS (L) TRIOSSES, PHOSPHATES/CT               |
| => e |       |   |  |
| E73  | 2668  |   | CARBOHYDRATES AND SUGARS, ANALYSIS/CT                              |
| E74  | 31235 |   | CARBOHYDRATES AND SUGARS, BIOLOGICAL STUDIES/CT                    |
| E75  | 1528  |   | CARBOHYDRATES AND SUGARS, COMPOUNDS/CT                             |
| E76  | 1     |   | CARBOHYDRATES AND SUGARS, DERIVATIVES (GENERAL)/CT                 |
| E77  | 813   |   | CARBOHYDRATES AND SUGARS, ESTERS/CT                                |
| E78  | 14    |   | CARBOHYDRATES AND SUGARS, FORMATION (NONPREPARATIVE)/C<br>T        |
| E79  | 2     |   | CARBOHYDRATES AND SUGARS, HYDRAZONES/CT                            |
| E80  | 186   |   | CARBOHYDRATES AND SUGARS, MISCELLANEOUS/CT                         |
| E81  | 326   |   | CARBOHYDRATES AND SUGARS, OCCURRENCE/CT                            |
| E82  | 3     |   | CARBOHYDRATES AND SUGARS, POLYMERS/CT                              |
| E83  | 1932  |   | CARBOHYDRATES AND SUGARS, PREPARATION/CT                           |
| E84  | 116   |   | CARBOHYDRATES AND SUGARS, PROCESSES/CT                             |
| => e |       |   |  |
| E85  | 1097  |   | CARBOHYDRATES AND SUGARS, PROPERTIES/CT                            |
| E86  | 1534  |   | CARBOHYDRATES AND SUGARS, REACTIONS/CT                             |
| E87  | 577   |   | CARBOHYDRATES AND SUGARS, USES/CT                                  |
| E88  | 1043  |   | CARBOHYDRATES AND SUGARS, USES AND MISCELLANEOUS/CT                |
| E89  | 9     |   | CARBOHYDRATES, ACETALS/CT  |
| E90  | 2359  |   | CARBOHYDRATES, ANALYSIS/CT   |
| E91  | 28747 |   | CARBOHYDRATES, BIOLOGICAL STUDIES/CT                               |
| E92  | 291   |   | CARBOHYDRATES, COMPOUNDS/CT  |
| E93  | 3     |   | CARBOHYDRATES, DERIVATIVES (GENERAL)/CT                            |

|     |    |  |
|-----|----|--|
| E94 | 88 | CARBOHYDRATES, ESTERS/CT                     |
| E95 | 6  | CARBOHYDRATES, ETHERS/CT                     |
| E96 | 45 | CARBOHYDRATES, FORMATION (NONPREPARATIVE)/CT |

=> 'e

'E IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.

For a list of commands available to you in the current file, enter

"HELP COMMANDS" at an arrow prompt (=>).

=> e

|      |      |  |
|------|------|--|
| E97  | 6    | CARBOHYDRATES, HYDRAZONES/CT             |
| E98  | 191  | CARBOHYDRATES, MISCELLANEOUS/CT          |
| E99  | 377  | CARBOHYDRATES, OCCURRENCE/CT             |
| E100 | 6    | CARBOHYDRATES, POLYMERS/CT               |
| E101 | 2109 | CARBOHYDRATES, PREPARATION/CT            |
| E102 | 666  | CARBOHYDRATES, PROCESSES/CT              |
| E103 | 1116 | CARBOHYDRATES, PROPERTIES/CT             |
| E104 | 1604 | CARBOHYDRATES, REACTIONS/CT              |
| E105 | 967  | CARBOHYDRATES, USES/CT                   |
| E106 | 275  | CARBOHYDRATES, USES AND MISCELLANEOUS/CT |
| E107 | 23   | 2 CARBOIDS/CT                            |
| E108 | 0    | 1 CARBOLAC/CT                            |

=> d his

(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

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L1      180226 S CARBOHYDRATE
L2      1119609 S CATALY?
L3      31208 S ?POLYMER? (2A) STABILI?
L4      3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP
L5      2 S L1 AND L2 AND L3 AND L4
L6      376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?
L7      1235 S L6 AND L1
L8      1235 S L6 (P) L1
L9      351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?
L10     705 S L9 (P) L1
L11     88 S L8 AND POLYMER
        E CARBOHYDRATES/CT

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=> s l1 and l2 and l3

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L12     11 L1 AND L2 AND L3

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=> d scan

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L12     11 ANSWERS  HCAPLUS  COPYRIGHT 2003 ACS
IC      ICM  C12N011-10
        ICS  C12N011-12
CC      7-7 (Enzymes)
        Section cross-reference(s): 6, 16
TI      Stabilization of proteins by conjugation with sugar-containing polymers
ST      stabilization enzyme polymer saccharide conjugation
IT      Polyamides, uses
        Polyesters, uses
        RL: USES (Uses)
            (carbohydrate-contg., stabilization of proteins by
            conjugation with)
IT      Monosaccharides

```

RL: USES (Uses)  
 (polymers contg., for stabilization of proteins by conjugation to)

IT Translation, genetic  
 (proteinases for, stabilization of, by conjugation with water-sol. sugar-based polymers)

IT Immunoassay  
 (stabilization of reagent proteins for, by conjugation with water-sol. sugar-based polymers)

IT Antibodies  
 Enzymes  
 RL: PROC (Process)  
 (stabilization of, by conjugation with water-sol. sugar-based polymers)

IT Proteins, properties  
 RL: PRP (Properties)  
 (stabilization of, by conjugation with water-sol. sugar-based polymers)

IT Oligosaccharides  
 RL: USES (Uses)  
 (di-, polymers contg., for stabilization of proteins by conjugation to)

IT Vinyl compounds, polymers  
 RL: USES (Uses)  
 (polymers, carbohydrate-contg., stabilization of proteins by conjugation with)

IT Amination  
 (reductive, conjugation of proteins with vinyl sugars by, for conjugation with polyvinyl sugars for protein stabilization)

IT Oligosaccharides  
 RL: USES (Uses)  
 (tri-, polymers contg., for stabilization of proteins by conjugation to)

IT 9003-05-8D, Polyacrylamide, sugar conjugate-contg.  
 RL: USES (Uses)  
 (carbohydrate-contg., stabilization of proteins by conjugation with)

IT 75-05-8, Acetonitrile, biological studies 109-99-9, biological studies  
 123-91-1, 1,4-Dioxane, biological studies  
 RL: BIOL (Biological study)  
 (peptide synthesis with proteinases in, enzyme stabilization by conjugation with polyvinylsugars for)

IT 21026-87-9P, 2-N-Methacrylamido-2-deoxy-D-glucose 55324-97-5P,  
 6-Amino-6-deoxy-D-glucose hydrochloride 57649-10-2P,  
 3-Amino-3-deoxy-D-glucose hydrochloride 84516-65-4P,  
 3-Amino-3-N-methylacrylamido-D-glucose 133843-27-3P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (prepn. and reactions of, in prepn. water sol. polymer for conjugation and stabilization of proteins)

IT 9002-07-7DP, Trypsin, conjugates with polyvinylsugars 9004-07-3DP,  
 .alpha.-Chymotrypsin, conjugates with polyvinylsugars 9014-01-1DP,  
 Subtilisin, conjugates with polyvinylsugars  
 RL: PREP (Preparation)  
 (prepn. of, for stabilization of enzymic activity)

IT 79300-77-9DP, conjugates with enzymes 84516-66-5DP, conjugates with enzymes  
 133843-28-4DP, conjugates with enzymes  
 RL: PREP (Preparation)  
 (prepn. of, protein stabilization by)

IT 79300-77-9P, Poly(2-N-methacrylamido-2-deoxy-D-glucose) 84516-66-5P,  
 Poly(3-N-methacrylamido-3-deoxy-D-glucose) 133843-28-4P,  
 Poly(6-N-methacrylamido-6-deoxy-D-glucose)

RL: PREP (Preparation)  
 (prepn. of, protein stabilization by conjugation with)  
 IT 3850-45-1P 29701-44-8P 40162-59-2P 62074-76-4P 138850-03-0P  
 138850-04-1P 142878-86-2P  
 RL: PREP (Preparation)  
 (prepn. of, with enzymes in non-aq. solvents, enzyme stabilization by  
 conjugation with polyvinyl sugars in)  
 IT 1161-13-3 2361-96-8 2666-93-5 3504-37-8 4817-93-0 7324-05-2  
 21691-53-2 28635-78-1  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactions of, in peptide formation with enzymes in non-aq. solvents,  
 enzyme stabilization by conjugation with polyvinyl sugars in)  
 IT 66-84-2, Glucosamine hydrochloride 920-46-7, Methacryloyl chloride  
 24384-84-7 119051-86-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reactions of, in prepn. water sol. polymer for conjugation and  
 stabilization of proteins)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 CC 37-3 (Plastics Manufacture and Processing)  
 TI Study on synthetic vesicles from diallyldidodecylammonium salt  
 ST diallyldidodecylammonium bromide vesicle prepn polymn; radiochem polymn  
 diallyldidodecylammonium bromide; radical polymn diallyldidodecylammonium  
 bromide; **catalyst** radical polymn diallyldidodecylammonium  
 bromide; ultrasound diallyldidodecylammonium bromide vesicle; morphol  
 diallyldidodecylammonium bromide vesicle; osmosis diallyldidodecylammonium  
 bromide vesicle; dilayer membrane diallyldidodecylammonium bromide vesicle  
 IT Sound and Ultrasound, chemical and physical effects  
 (diallyldidodecylammonium bromide treatment by, for aq. vesicle  
 formation)  
 IT Polymer morphology  
 (of poly(diallyldidodecylammonium bromide) vesicles)  
 IT Osmosis  
 (of sugar solns., through vesicles of diallyldidodecylammonium bromide  
 and its homopolymer)  
 IT **Carbohydrates** and Sugars, properties  
 RL: PRP (Properties)  
 (osmosis of, through vesicles of diallyldidodecylammonium bromide and  
 its homopolymer)  
 IT Gamma ray, chemical and physical effects  
 (polymn. by, of diallyldidodecylammonium bromide vesicles)  
 IT Polymerization **catalysts**  
 (radical, AIBN and ammonium persulfate, for diallyldidodecylammonium  
 bromide vesicles)  
 IT Membranes  
 (vesicular, diallyldidodecylammonium bromide and its homopolymer,  
 prepn. and characterization of)  
 IT 78-67-1, AIBN 7727-54-0, Ammonium persulfate  
 RL: CAT (Catalyst use); USES (Uses)  
 (**catalysts**, for polymn. of diallyldidodecylammonium bromide  
 vesicles)  
 IT 107-11-9, Allylamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with allyl chloride and dodecyl bromide)  
 IT 143-15-7, Dodecyl bromide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with allylamine and allyl chloride)  
 IT 107-05-1, Allyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with allylamine and dodecyl bromide)  
 IT 96499-25-1P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (vesicles, prepn. and characterization of)  
 IT 96499-24-0P, Diallyldidodecylammonium bromide  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (vesicles, prepn. and polymn. of)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM C08G018-14  
 NCL 106162000  
 CC 37-6 (Plastics Manufacture and Processing)  
 TI Stabilization of the B-side of polyurethane foam-producing compositions  
 ST polyurethane manuf **catalyst** stability; amine **catalyst**  
 stability polyurethane; foam polyurethane **catalyst** stability;  
**polymn catalyst** stability polyurethane;  
 crosslinking **catalyst** stability polyurethane  
 IT Crosslinking **catalysts**  
 Polymerization **catalysts**  
 (amines, storage-stable polyol compns. contg., for polyurethane manuf.)  
 IT Amines, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (**catalysts**, storage-stable polyol compns. contg., for  
 polyurethane manuf.)  
 IT Urethane polymers, preparation  
 RL: PREP (Preparation)  
 (cellular, prepn. of, amine **catalysts** for, storage-stable  
 polyol compns. contg.)  
 IT 77-86-1 91-65-6 100-74-3 102-60-3 102-71-6, uses and miscellaneous  
 108-01-0 109-02-4 110-18-9 112-18-5 115-70-8 120-85-4  
 121-44-8, uses and miscellaneous 124-68-5 280-57-9 693-98-1  
 1739-84-0 2212-32-0  
 RL: CAT (Catalyst use); USES (Uses)  
 (**catalysts**, storage-stable polyol compns. contg., for  
 polyurethane manuf.)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM C07H015-00  
 CC 44-4 (Industrial Carbohydrates)  
 Section cross-reference(s): 67  
 TI **Catalytic** method for modifying **carbohydrates**,  
 alcohols, aldehydes or polyhydroxy compounds  
 ST **carbohydrate** oxidn platinum nanoparticle **catalyst**;  
 polyvinylpyrrolidone stabilized platinum colloid **catalyst**  
 sorbose oxidn  
 IT Nanoparticles  
 Oxidation  
 Oxidation **catalysts**  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
 metal nanoparticle **catalysts**)  
 IT Alcohols, processes  
 Aldehydes, processes  
**Carbohydrates**, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)



(chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT Alcohols, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (polyhydric; chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 9003-39-8, Poly(vinylpyrrolidone)  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of metal nanoparticle **catalysts** stabilized with)

IT 7440-02-0, Nickel, uses 7440-05-3, Palladium, uses 7440-16-6, Rhodium, uses 7440-18-8, Ruthenium, uses 7440-50-8, Copper, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 7782-44-7, Oxygen, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 57-48-7, Fructose, processes 58-86-6, Xylose, processes 63-42-3, Lactose 69-79-4, Maltose 499-40-1, Isomaltose 51411-23-5, Trehalulose  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 133634-68-1P 133634-69-2P 150787-99-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 7440-06-4, Platinum, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (nanoparticles; chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 50-99-7, Glucose, reactions 57-50-1, Saccharose, reactions 87-79-6, Sorbose  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidn.; chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 124-22-1, Dodecylamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination of isomaltulose; chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

IT 13718-94-0, Isomaltulose  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination with dodecylamine; chem. conversion of **carbohydrates**, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal nanoparticle catalysts**)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

CC 7-7 (Enzymes)

Section cross-reference(s): 9, 33

TI New **carbohydrate**-based materials for the stabilization of proteins

ST **carbohydrate** polymer prepn enzyme immobilization; monoclonal antibody immobilization **carbohydrate** polymer; protein immobilization **carbohydrate** conjugate prepn

IT Enzymes

Proteins, reactions

RL: PROC (Process)

(immobilization of, on aminodeoxyglucose-based **polymer**, protein **stability** in relation to)

IT Immobilization, biochemical

(of enzymes and other proteins, on aminodeoxyglucose-based **polymer**, protein **stability** in relation to)

IT Antibodies

RL: PROC (Process)

(monoclonal, immobilization of, on aminodeoxyglucose-based **polymer**, protein **stability** in relation to)

IT 9002-07-7, Trypsin 9004-07-3, .alpha.-Chymotrypsin 9014-01-1, Subtilisin 9073-78-3, Thermolysin 80498-17-5

RL: PROC (Process)

(immobilization of, on aminodeoxyglucose-based **polymer**, protein **stability** in relation to)

IT 79300-77-9P 84516-66-5P 133843-28-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. and immobilization of enzymes and other proteins on)

IT 21026-87-9P 84516-65-4P 133843-27-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. and polymn. of, in prepn. of protein stabilizers)

IT 920-46-7, Methacryloyl chloride

RL: RCT (Reactant); RACT (Reactant or reagent)

(N-acylation by, of aminodeoxyglucoses)

IT 576-44-3 576-47-6, 6-Amino-6-deoxyglucose 3416-24-8, 2-Amino-2-deoxyglucose

RL: RCT (Reactant); RACT (Reactant or reagent)

(N-acylation of, by methacryloyl chloride)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

CC 35-8 (Chemistry of Synthetic High Polymers)

TI Thermal stability of poly(methyl methacrylate) as polymerized in aqueous media by using redox systems as initiators

ST PMMA thermal **stability polymn catalyst**;

cerium **catalyst** PMMA thermal stability; alc cerium redox

**catalyst** polymn; glucose cerium redox **catalyst** polymn;

maltose cerium redox **catalyst** polymn; cellobiose cerium redox

**catalyst** polymn; kinetics thermal degradn PMMA

IT Polymerization **catalysts**

(redox, cerium-alc. and -**carbohydrate** systems, for Me methacrylate, PMMA thermal stability in relation to)

IT Kinetics of polymer degradation

Polymer degradation

(thermal, of PMMA, effect of cerium redox polymn. **catalysts** on)

IT 7440-45-1, Cerium, uses and miscellaneous  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, alone or mixts. with alcs. or  
 carbohydrates, for polymn. of Me methacrylate, PMMA thermal  
 stability in relation to)

IT 50-99-7, D-Glucose, uses and miscellaneous 67-63-0, Isopropyl alcohol,  
 uses and miscellaneous 69-79-4, Maltose 78-83-1, Isobutyl alcohol,  
 uses and miscellaneous 528-50-7, Cellobiose  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, contg. cerium, for polymn. of Me methacrylate,  
 PMMA thermal stability in relation to)

IT 9011-14-7, PMMA  
 RL: PRP (Properties)  
 (thermal stability of, effect of cerium redox polymn. catalysts  
 on)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 CC 33-3 (Carbohydrates)  
 Section cross-reference(s): 34, 35

TI Synthesis and applications of pseudopolysaccharides

ST pseudopolysaccharide; galactose polyvinyl ether; lysine polymer  
 stabilization pseudopolysaccharide

IT Carbohydrates, preparation  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (polyvinyl ethers, prepn. of, by epoxide cleavage)

IT Polysaccharides, preparation  
 (pseudo, prepn. of, from polyvinyl alc. and oxiranyl-contg. sugars)

IT 9002-89-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (addn. reaction of, with oxiranyl-contg. sugars, base-catalyzed  
 )

IT 2771-58-6 70451-11-5  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (epoxidn. of)

IT 70451-04-6P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and acetylation of)

IT 70451-09-1P 70969-90-3P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. and addn. reaction with polyvinyl alc., base-catalyzed  
 )

IT 70451-06-8P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and elimination reaction of)

IT 53929-27-4P 53929-28-5P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and epoxidn. of)

IT 70468-28-9P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and hydrogenation of)

IT 70451-08-0P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (prepn. and ring cleavage of)

IT 70451-05-7P 70451-07-9P 70451-10-4P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (prepn. of)

IT 70468-26-7 70468-27-8  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reaction of, with polylysine)

IT 25104-18-1  
 RL: PROC (Process)  
 (stabilization of, by pseudopolysaccharides)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C09D133-00  
 ICS C08F002-44; C08F220-56; C09K003-10; C09K017-00; E21D011-38

CC 42-10 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 58

TI Manufacture of highly stable gels

ST acrylamide **polymer** gel soil **stabilization**; acrylamide  
 methylene bisacrylamide sodium aluminate gel; waterproof coating  
 acrylamide polymer gel; redox **catalyst** acrylamide polymer gel;  
 liq sepn acrylamide polymer gel

IT Gels  
 (acrylamide polymers, contg. sodium aluminate, highly stable, for  
 coatings and soil stabilization)

IT Esters, uses  
 RL: USES (Uses)  
 (gelling-promoters for sodium aluminate, solns. contg., for highly  
 stable gels for coatings and soil stabilization)

IT Soil stabilization  
 (gels for, acrylamide polymers contg. sodium aluminate as, highly  
 stable)

IT Reducing agents  
 (inorg., solns. contg., highly stable acrylamide polymer gels from, for  
 coatings and soil stabilization)

IT Aldehydes, uses  
 Amines, uses  
**Carbohydrates** and Sugars, uses  
 Chlorates  
 Perborates  
 Peroxysulfates  
 Sulfinic acids  
 Sulfites  
 Thiols, uses  
 RL: USES (Uses)  
 (solns. contg., highly stable acrylamide polymer gels from, for  
 coatings and soil stabilization)

IT Alcohols, esters  
 RL: USES (Uses)  
 (aliph., esters, solns. contg., highly stable acrylamide polymer gels  
 from, for coatings and soil stabilization)

IT Vinyl compounds, uses  
 RL: USES (Uses)  
 (di-, gels, contg. sodium aluminate, highly stable, for coatings and  
 soil stabilization)

IT Sulfites  
 RL: USES (Uses)  
 (hydrogen, solns. contg., highly stable acrylamide polymer gels from,  
 for coatings and soil stabilization)

IT Peroxides, uses

RL: USES (Uses)  
 (org., solns. contg., highly stable acrylamide polymer gels from, for  
 coatings and soil stabilization)

IT Coating materials  
 (water-resistant, gel-like, acrylamide polymers contg. sodium  
 aluminate, highly stable)

IT 25034-58-6  
 RL: USES (Uses)  
 (gels, contg. sodium aluminate, highly stable, for coatings and soil  
 stabilization)

IT 102-76-1, Glycerin triacetate 141-43-5, Ethanolamine, miscellaneous  
 302-01-2, Hydrazine, miscellaneous 7631-90-5, Sodium bisulfite  
 7647-01-0, Hydrochloric acid, uses 7722-84-1, Hydrogen peroxide, uses  
 7727-54-0, Ammonium persulfate 11138-49-1, Sodium aluminate  
 RL: USES (Uses)  
 (solns. contg., highly stable acrylamide polymer gels from, for  
 coatings and soil stabilization)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM G01N015-00  
 NCL 073061100R  
 CC 80-2 (Organic Analytical Chemistry)  
 Section cross-reference(s): 9

TI Electrochemical detector for liquid-chromatographic analysis of  
**carbohydrates**

ST **carbohydrate** analysis liq chromatograph detector; electrochem  
 detector **carbohydrate** chromatog analysis

IT **Carbohydrates** and Sugars, analysis  
 RL: ANT (Analyte); ANST (Analytical study)  
 (anal. of, liq.-chromatog., electrochem. detector for)

IT Chromatographs, column and liquid  
 (in anal. of **carbohydrates**, electrochem. detector for)

IT Diabetes insipidus  
 Diabetes mellitus  
 (monitoring of, liq.-chromatog., electrochem. detector for)

IT 50-70-4, D-Sorbitol, analysis 57-48-7, Fructose, analysis 57-50-1,  
 Sucrose, analysis 69-65-8, D-Mannitol 69-79-4 87-89-8, myo-Inositol  
 87-99-0, Xylitol 492-62-6, .alpha.-D-Glucopyranose 6014-42-2  
 10323-20-3, D-Arabinose 14641-93-1, .alpha.-Lactose  
 RL: ANT (Analyte); ANST (Analytical study)  
 (detn. of, liq.-chromatog., electrochem. detector in)

IT 1344-70-3, Copper oxide 113527-14-3 7440-50-8, Copper, uses and  
 miscellaneous  
 RL: ANST (Analytical study)  
 (electrochem. detector involving, in liq.-chromatog. anal. of  
**carbohydrates**)

IT 7440-44-0, Carbon, uses and miscellaneous  
 RL: ANST (Analytical study); USES (Uses)  
 (glassy, electrochem. detector involving, in liq.-chromatog. anal. of  
**carbohydrates**)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 CC 10-6 (Microbial Biochemistry)  
 Section cross-reference(s): 6, 33

TI Influence of anions on the properties of microbial polysaccharides in  
 solution

ST microorganism polysaccharide property anion; succinoglycan soln chloride  
sulfate phosphate; xanthan soln bromide thiocyanate salicylate iodide

IT Anions  
(microbial polysaccharide transition temp. response to)

IT Polysaccharides, properties  
RL: PRP (Properties)  
(of microorganism, transition temp. of, anions effect on)

IT 69-72-7, biological studies 302-04-5, Thiocyanate, biological studies  
14265-44-2, Phosphate, biological studies 14808-79-8, Sulfate,  
biological studies 16887-00-6, Chloride, biological studies  
20461-54-5, Iodide, biological studies 24959-67-9, Bromide, biological  
studies  
RL: BIOL (Biological study)  
(microbial polysaccharide transition temp. response to)

IT 11138-66-2, Xanthan 73667-50-2, Succinoglycan  
RL: BIOL (Biological study)  
(of microorganism, anions effect on transition temp. of)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L12 11 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
NCL 39B  
CC 47 (Plastics)  
TI **Carbohydrate** ether mixtures for making polymerizable solutions  
IT Polymerization  
(**catalysts**, **carbohydrate** ether as)  
IT **Carbohydrates**  
(ethers of, polymerizable, stable mixts. with **catalysts**)  
IT **Catalysts** and **Catalysis**  
(for polymerization, of **carbohydrate** ethers, stable mixts.  
contg.)  
IT Ethers  
(of **carbohydrates**, polymerizable, stable mixts. with  
**catalysts**)  
IT Peroxy compounds  
(**polymerization stabilizers** contg., for mixts. of  
**carbohydrate** ethers)  
IT Cellulose, aldehyde  
(allyl derivs. and crotyl derivs., stable polymerizable mixts. with  
**catalysts**)  
IT Amyloses  
(allyl derivs., stable polymerizable mixts. with **catalysts**)  
IT Amylopectins  
(allyl derivs., stable polymerization mixts. with **catalysts**)  
IT Amylopectins  
Amyloses  
(crotyl derivs., stable polymerizable mixts. with **catalysts**)  
IT 9005-25-8, Starch  
(allyl derivs., stable polymerizable mixts. with **catalysts**)  
IT 9005-25-8, Starch  
(crotyl derivs., stable polymerizable mixts. with **catalysts**)

ALL ANSWERS HAVE BEEN SCANNED

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(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
 L2 1119609 S CATALY?  
 L3 31208 S ?POLYMER? (2A) STABILI?  
 L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP  
 L5 2 S L1 AND L2 AND L3 AND L4  
 L6 376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?  
 L7 1235 S L6 AND L1  
 L8 1235 S L6 (P) L1  
 L9 351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?  
 L10 705 S L9 (P) L1  
 L11 88 S L8 AND POLYMER  
 E CARBOHYDRATES/CT  
 L12 11 S L1 AND L2 AND L3

=> s glucose or fructose or sorbose or sucrose or isomaltulose or xylose or isomaltose or maltose or lactose

347630 GLUCOSE  
 720 GLUCOSES  
 347783 GLUCOSE  
 (GLUCOSE OR GLUCOSES)  
 53878 FRUCTOSE  
 84 FRUCTOSES  
 53889 FRUCTOSE  
 (FRUCTOSE OR FRUCTOSES)  
 3223 SORBOSE  
 38 SORBOSES  
 3234 SORBOSE  
 (SORBOSE OR SORBOSES)  
 123272 SUCROSE  
 87 SUCROSES  
 123283 SUCROSE  
 (SUCROSE OR SUCROSES)  
 224 ISOMALTULOSE  
 1 ISOMALTULOSES  
 224 ISOMALTULOSE  
 (ISOMALTULOSE OR ISOMALTULOSES)  
 23086 XYLOSE  
 93 XYLOSES  
 23109 XYLOSE  
 (XYLOSE OR XYLOSES)  
 1788 ISOMALTOSE  
 1 ISOMALTOSES  
 1789 ISOMALTOSE  
 (ISOMALTOSE OR ISOMALTOSES)  
 23351 MALTOSE  
 38 MALTOSES  
 23357 MALTOSE  
 (MALTOSE OR MALTOSES)  
 42639 LACTOSE  
 81 LACTOSES  
 42647 LACTOSE  
 (LACTOSE OR LACTOSES)

L13 505133 GLUCOSE OR FRUCTOSE OR SORBOSE OR SUCROSE OR ISOMALTULOSE OR  
 XYLOSE OR ISOMALTOSE OR MALTOSE OR LACTOSE

=> s l2 and l3 and l13

L14 31 L2 AND L3 AND L13

=> s l14 and l4

L15 4 L14 AND L4

=> d scan

L15 4 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
IC ICM G01N015-00  
NCL 073061100R  
CC 80-2 (Organic Analytical Chemistry)  
Section cross-reference(s): 9  
TI Electrochemical detector for liquid-chromatographic analysis of  
carbohydrates  
ST carbohydrate analysis liq chromatograph detector; electrochem detector  
carbohydrate chromatog analysis  
IT Carbohydrates and Sugars, analysis  
RL: ANT (Analyte); ANST (Analytical study)  
(anal. of, liq.-chromatog., electrochem. detector for)  
IT Chromatographs, column and liquid  
(in anal. of carbohydrates, electrochem. detector for)  
IT Diabetes insipidus  
Diabetes mellitus  
(monitoring of, liq.-chromatog., electrochem. detector for)  
IT 50-70-4, D-Sorbitol, analysis 57-48-7, **Fructose**, analysis  
57-50-1, **Sucrose**, analysis 69-65-8, D-Mannitol 69-79-4  
87-89-8, myo-Inositol 87-99-0, Xylitol 492-62-6, .alpha.-D-  
Glucopyranose 6014-42-2 10323-20-3, D-Arabinose 14641-93-1, .alpha.-  
**Lactose**  
RL: ANT (Analyte); ANST (Analytical study)  
(detn. of, liq.-chromatog., electrochem. detector in)  
IT 1344-70-3, **Copper** oxide 113527-14-3 7440-50-8,  
**Copper**, uses and miscellaneous  
RL: ANST (Analytical study)  
(electrochem. detector involving, in liq.-chromatog. anal. of  
carbohydrates)  
IT 7440-44-0, Carbon, uses and miscellaneous  
RL: ANST (Analytical study); USES (Uses)  
(glassy, electrochem. detector involving, in liq.-chromatog. anal. of  
carbohydrates)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L15 4 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
IC ICM B01F017-00  
CC 35-8 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 5, 46  
TI Use of reactive polymeric surfactants in the formation of emulsions  
ST emulsion reactive **polymer** surfactant **stabilizer**  
encapsulant; microcapsule reactive polymer interfacial polymn agrochem  
agent  
IT Polyoxyalkylenes, preparation  
RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or  
engineered material use); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)  
(acrylic, graft; prepn. of reactive polymeric surfactant emulsifier  
encapsulants for agrochem. agents)  
IT Polymerization  
(atom transfer, radical; prepn. of reactive polymeric surfactant  
emulsifier encapsulants for agrochem. agents)  
IT Crosslinking  
(interfacial; prepn. of reactive polymeric surfactant emulsifier  
encapsulants for agrochem. agents)  
IT Encapsulation



(microencapsulation; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT Polyurethanes, preparation  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (polyoxyalkylene-, graft; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT Agrochemicals  
 Emulsifying agents  
 Surfactants  
 (prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 366-18-7, 2,2'-Bipyridine 4206-52-4, N-Propyl-2-pyridylmethanimine  
 RL: CAT (Catalyst use); USES (Uses)  
 (ATRP **catalyst** ligand; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 7758-89-6, **Copper** chloride (CuCl) 7787-70-4, **Copper** bromide (CuBr)  
 RL: CAT (Catalyst use); USES (Uses)  
 (ATRP **catalyst**; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 119182-44-4P, 2-Hydroxyethyl methacrylate-methyl methacrylate block copolymer 478813-96-6P  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (diblock; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 57-48-7D, D-**Fructose**, polymers, alkyl derivs. 1338-43-8, Span 80 9008-63-3, Morwet D425 104206-82-8, Mesotrione  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (dispersant for internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 9002-89-5, Poly(vinyl alcohol)  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (dispersant; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 79538-32-2, Tefluthrin  
 RL: AGR (Agricultural use); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (dispersed internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 7440-50-8, **Copper**, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (dispersed internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 600-00-0, Ethyl-2-bromoisobutyrate 245070-97-7  
 RL: CAT (Catalyst use); USES (Uses)  
 (initiator; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 7757-82-6, Sodium sulfate, processes 67306-00-7, Fenpropidin 87392-12-9, s-Metolachlor 91465-08-6, .lambda.-Cyhalothrin 117428-22-5, Picoxystrobin 446255-83-0, Solvesso 200  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical

process); PROC (Process)

(internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 478814-10-7P 478814-11-8P 478814-12-9P 478814-13-0P 478814-14-1P  
478814-16-3P 478814-18-5P 478814-19-6P 478814-20-9P

RL: AGR (Agricultural use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(microcapsules; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 478813-84-2P 478813-85-3P 478813-86-4P 478813-87-5P 478813-88-6P  
478813-89-7P 478813-91-1P 478813-92-2P 478813-93-3P 478813-94-4P  
478813-95-5P 478813-97-7P 478813-98-8P 478813-99-9P 478814-00-5P  
478814-01-6P 478932-53-5P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 478814-02-7P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of crosslinked surfactant emulsifiers at air/water interface to prep. stable emulsions of internal liq. phases)

IT 478814-03-8P 478814-04-9P 478814-05-0P 478814-06-1P 478814-07-2P  
478814-08-3P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 99821-01-9, Atlas G5000

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

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IC ICM C07H015-00

CC 44-4 (Industrial Carbohydrates)

Section cross-reference(s): 67

TI **Catalytic** method for modifying carbohydrates, alcohols, *PCT of instant.*  
aldehydes or polyhydroxy compounds

ST carbohydrate oxidn **platinum** nanoparticle **catalyst**;  
polyvinylpyrrolidone stabilized **platinum** colloid  
**catalyst sorbose** oxidn

IT Nanoparticles

Oxidation

Oxidation **catalysts**

(chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized metal** nanoparticle **catalysts**)

IT Alcohols, processes

Aldehydes, processes

Carbohydrates, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)

(chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy compds. in presence of **polymer-stabilized**

**metal nanoparticle catalysts)**

IT Alcohols, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (polyhydric; chem. conversion of carbohydrates, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 9003-39-8, Poly(vinylpyrrolidone)  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy  
 compds. in presence of **metal nanoparticle catalysts**  
 stabilized with)

IT 7440-02-0, **Nickel**, uses 7440-05-3, **Palladium**, uses  
 7440-16-6, **Rhodium**, uses 7440-18-8, **Ruthenium**, uses  
 7440-50-8, **Copper**, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy  
 compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 7782-44-7, Oxygen, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy  
 compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 57-48-7, **Fructose**, processes 58-86-6, **Xylose**,  
 processes 63-42-3, **Lactose** 69-79-4, **Maltose**  
 499-40-1, **Isomaltose** 51411-23-5, Trehalulose  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy  
 compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 133634-68-1P 133634-69-2P 150787-99-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chem. conversion of carbohydrates, alcs., aldehydes or polyhydroxy  
 compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 7440-06-4, **Platinum**, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (nanoparticles; chem. conversion of carbohydrates, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 50-99-7, **Glucose**, reactions 57-50-1, Saccharose, reactions  
 87-79-6, **Sorbose**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidn.; chem. conversion of carbohydrates, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal nanoparticle catalysts)**

IT 124-22-1, Dodecylamine  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination of **isomaltulose**; chem. conversion of  
 carbohydrates, alcs., aldehydes or polyhydroxy compds. in presence of  
**polymer-stabilized metal nanoparticle**  
**catalysts)**

IT 13718-94-0, **Isomaltulose**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination with dodecylamine; chem. conversion of  
 carbohydrates, alcs., aldehydes or polyhydroxy compds. in presence of  
**polymer-stabilized metal nanoparticle**  
**catalysts)**

L15 4 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 IC ICM C08G018-48  
 ICS C08G018-08; C08J009-00  
 ICI C08L075-04  
 CC 37-6 (Plastics Manufacture and Processing)  
 TI Polyurethane foam compositions having improved physical properties  
 ST polyethylene glycol **sucrose** polyurethane foam; polypropylene  
 glycol glycerin polyurethane foam; flexible polyurethane foam prep; phys  
 property polyurethane foam; alkali **metal** phosphate polyurethane  
 foam; aluminum ammonium salt polyurethane foam; acid chloride polyurethane  
 foam flexible  
 IT Urethane **polymers**, miscellaneous  
 RL: MSC (Miscellaneous)  
 (foam **stabilizer**-contg., flexible, with improved phys.  
 properties)  
 IT Acid chlorides  
 RL: USES (Uses)  
 (foam stabilizers, polyurethane contg., flexible, with improved phys.  
 properties)  
 IT Stabilizing agents  
 (foam, polyurethane contg., flexible, with improved phys. properties)  
 IT Phosphates, uses  
 RL: USES (Uses)  
 (aluminum boro-, foam stabilizers, polyurethane contg., flexible, with  
 improved phys. properties)  
 IT Polyphosphoric acids  
 RL: USES (Uses)  
 (aluminum salts, foam stabilizers, polyurethane contg., flexible, with  
 improved phys. properties)  
 IT Phosphates, uses  
 RL: USES (Uses)  
 (boro-, foam stabilizers, polyurethane contg., flexible, with improved  
 phys. properties)  
 IT Phosphates, uses  
 RL: USES (Uses)  
 (dihydrogen, foam stabilizers, polyurethane contg., flexible, with  
 improved phys. properties)  
 IT Carboxylic acids, esters  
 RL: USES (Uses)  
 (esters, foam stabilizers, polyurethane contg., flexible, with improved  
 phys. properties)  
 IT 7732-18-5, Water, uses  
 RL: USES (Uses)  
 (blowing agents, polyurethane contg., flexible, with improved phys.  
 properties)  
 IT 57516-88-8 69521-62-6 84631-61-8 150346-95-5  
 RL: USES (Uses)  
 (foam stabilizer-contg., flexible, with improved phys. properties)  
 IT 7558-80-7 7646-93-7 7664-93-9D, Sulfuric acid, alkali **metal**  
 salts 7722-76-1 7778-77-0 7783-28-0 7803-63-6 10043-01-3,  
 Aluminum trisulfate 13453-80-0  
 RL: USES (Uses)  
 (foam stabilizers, polyurethane contg., flexible, with improved phys.  
 properties)

ALL ANSWERS HAVE BEEN SCANNED

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FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 S CARBOHYDRATE  
L2 1119609 S CATALY?  
L3 31208 S ?POLYMER? (2A) STABILI?  
L4 3019679 S METAL OR PLATINUM OR PALLADIUM OR RHODIUM OR RUTHENIUM OR COP  
L5 2 S L1 AND L2 AND L3 AND L4  
L6 376091 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) AND CATALY?  
L7 1235 S L6 AND L1  
L8 1235 S L6 (P) L1  
L9 351208 S (PT OR PD OR RH OR RU OR CU OR NI OR L4) (P) CATALY?  
L10 705 S L9 (P) L1  
L11 88 S L8 AND POLYMER  
E CARBOHYDRATES/CT  
L12 11 S L1 AND L2 AND L3  
L13 505133 S GLUCOSE OR FRUCTOSE OR SORBOSE OR SUCROSE OR ISOMALTULOSE OR  
L14 31 S L2 AND L3 AND L13  
L15 4 S L14 AND L4

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(FILE 'HOME' ENTERED AT 14:21:51 ON 18 MAR 2003)

FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

L1 180226 SEA ABB=ON PLU=ON CARBOHYDRATE  
L2 1119609 SEA ABB=ON PLU=ON CATALY?  
L3 31208 SEA ABB=ON PLU=ON ?POLYMER? (2A) STABILI?  
L4 3019679 SEA ABB=ON PLU=ON METAL OR PLATINUM OR PALLADIUM OR RHODIUM  
OR RUTHENIUM OR COPPER OR NICKEL OR ALLOY  
L5 2 SEA ABB=ON PLU=ON L1 AND L2 AND L3 AND L4  
DIS L5 1-2 BIB ABS  
L\*\*\* DEL3426702 S PT OR PD OR RH OR RU OR CU OR NI OR L4  
L6 376091 SEA ABB=ON PLU=ON (PT OR PD OR RH OR RU OR CU OR NI OR L4)  
AND CATALY?  
L7 1235 SEA ABB=ON PLU=ON L6 AND L1  
L8 1235 SEA ABB=ON PLU=ON L6 (P) L1  
L9 351208 SEA ABB=ON PLU=ON (PT OR PD OR RH OR RU OR CU OR NI OR L4)  
(P) CATALY?  
L10 705 SEA ABB=ON PLU=ON L9 (P) L1  
L11 88 SEA ABB=ON PLU=ON L8 AND POLYMER  
D L5 TI TOT  
D BIB IND 1  
D BIB IND 1 L5  
E CARBOHYDRATES/CT  
L12 11 SEA ABB=ON PLU=ON L1 AND L2 AND L3  
D SCAN  
L13 505133 SEA ABB=ON PLU=ON GLUCOSE OR FRUCTOSE OR SORBOSE OR SUCROSE  
OR ISOMALTULOSE OR XYLOSE OR ISOMALTOSE OR MALTOSE OR LACTOSE  
L14 31 SEA ABB=ON PLU=ON L2 AND L3 AND L13  
L15 4 SEA ABB=ON PLU=ON L14 AND L4  
D SCAN

FILE HOME

FILE HCAPLUS

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FILE COVERS 1907 - 18 Mar 2003 VOL 138 ISS 12  
FILE LAST UPDATED: 17 Mar 2003 (20030317/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d que l14

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L2      1119609 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CATALY?
L3      31208 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?POLYMER? (2A) STABILI?
L13     505133 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLUCOSE OR FRUCTOSE OR
        SORBOSE OR SUCROSE OR ISOMALTULOSE OR XYLOSE OR ISOMALTOSE OR
        MALTOSE OR LACTOSE
L14     31 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L3 AND L13
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=> d que l15

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L2      1119609 SEA FILE=HCAPLUS ABB=ON  PLU=ON  CATALY?
L3      31208 SEA FILE=HCAPLUS ABB=ON  PLU=ON  ?POLYMER? (2A) STABILI?
L4      3019679 SEA FILE=HCAPLUS ABB=ON  PLU=ON  METAL OR PLATINUM OR PALLADIUM
        OR RHODIUM OR RUTHENIUM OR COPPER OR NICKEL OR ALLOY
L13     505133 SEA FILE=HCAPLUS ABB=ON  PLU=ON  GLUCOSE OR FRUCTOSE OR
        SORBOSE OR SUCROSE OR ISOMALTULOSE OR XYLOSE OR ISOMALTOSE OR
        MALTOSE OR LACTOSE
L14     31 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L2 AND L3 AND L13
L15     4 SEA FILE=HCAPLUS ABB=ON  PLU=ON  L14 AND L4
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FILE 'HCAPLUS' ENTERED AT 14:22:06 ON 18 MAR 2003

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L1      180226 SEA ABB=ON  PLU=ON  CARBOHYDRATE
L2      1119609 SEA ABB=ON  PLU=ON  CATALY?
L3      31208 SEA ABB=ON  PLU=ON  ?POLYMER? (2A) STABILI?
L4      3019679 SEA ABB=ON  PLU=ON  METAL OR PLATINUM OR PALLADIUM OR RHODIUM
        OR RUTHENIUM OR COPPER OR NICKEL OR ALLOY
L5      2 SEA ABB=ON  PLU=ON  L1 AND L2 AND L3 AND L4
        DIS L5 1-2 BIB ABS
L*** DEL3426702 S PT OR PD OR RH OR RU OR CU OR NI OR L4
L6      376091 SEA ABB=ON  PLU=ON  (PT OR PD OR RH OR RU OR CU OR NI OR L4)
        AND CATALY?
L7      1235 SEA ABB=ON  PLU=ON  L6 AND L1
L8      1235 SEA ABB=ON  PLU=ON  L6 (P) L1
L9      351208 SEA ABB=ON  PLU=ON  (PT OR PD OR RH OR RU OR CU OR NI OR L4)
        (P) CATALY?
L10     705 SEA ABB=ON  PLU=ON  L9 (P) L1
L11     88 SEA ABB=ON  PLU=ON  L8 AND POLYMER
        D L5 TI TOT
        D BIB IND 1
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          D BIB IND 1 L5
          E CARBOHYDRATES/CT
L12      11 SEA ABB=ON  PLU=ON  L1 AND L2 AND L3
          D SCAN
L13      505133 SEA ABB=ON  PLU=ON  GLUCOSE OR FRUCTOSE OR SORBOSE OR SUCROSE
          OR ISOMALTULOSE OR XYLOSE OR ISOMALTOSE OR MALTOSE OR LACTOSE
L14      31 SEA ABB=ON  PLU=ON  L2 AND L3 AND L13
L15      4 SEA ABB=ON  PLU=ON  L14 AND L4
          D SCAN
          D QUE L14
          D QUE L15

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FILE HOME

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FILE COVERS 1907 - 18 Mar 2003 VOL 138 ISS 12  
 FILE LAST UPDATED: 17 Mar 2003 (20030317/ED)

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=> s (l1 or l13) and l2 and (l4 or l9) and l3
L16      5 (L1 OR L13) AND L2 AND (L4 OR L9) AND L3

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=> d scan

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L16      5 ANSWERS  HCAPLUS  COPYRIGHT 2003 ACS
IC       ICM  G01N015-00
NCL      073061100R
CC       80-2 (Organic Analytical Chemistry)
          Section cross-reference(s): 9
TI       Electrochemical detector for liquid-chromatographic analysis of
carbohydrates
ST       carbohydrate analysis liq chromatograph detector; electrochem
          detector carbohydrate chromatog analysis
IT       Carbohydrates and Sugars, analysis
          RL: ANT (Analyte); ANST (Analytical study)
          (anal. of, liq.-chromatog., electrochem. detector for)
IT       Chromatographs, column and liquid
          (in anal. of carbohydrates, electrochem. detector for)
IT       Diabetes insipidus
          Diabetes mellitus
          (monitoring of, liq.-chromatog., electrochem. detector for)
IT       50-70-4, D-Sorbitol, analysis 57-48-7, Fructose, analysis
          57-50-1, Sucrose, analysis 69-65-8, D-Mannitol 69-79-4
          87-89-8, myo-Inositol 87-99-0, Xylitol 492-62-6, .alpha.-D-
          Glucopyranose 6014-42-2 10323-20-3, D-Arabinose 14641-93-1, .alpha.-

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## Lactose

RL: ANT (Analyte); ANST (Analytical study)

(detn. of, liq.-chromatog., electrochem. detector in)

IT 1344-70-3, **Copper** oxide 113527-14-3 7440-50-8,

**Copper**, uses and miscellaneous

RL: ANST (Analytical study)

(electrochem. detector involving, in liq.-chromatog. anal. of  
**carbohydrates**)

IT 7440-44-0, Carbon, uses and miscellaneous

RL: ANST (Analytical study); USES (Uses)

(glassy, electrochem. detector involving, in liq.-chromatog. anal. of  
**carbohydrates**)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

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IC ICM B01F017-00

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 5, 46

TI Use of reactive polymeric surfactants in the formation of emulsions

ST emulsion reactive **polymer** surfactant **stabilizer**

encapsulant; microcapsule reactive polymer interfacial polymn agrochem  
agent

IT Polyoxyalkylenes, preparation

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or  
engineered material use); PREP (Preparation); RACT (Reactant or reagent);  
USES (Uses)

(acrylic, graft; prepn. of reactive polymeric surfactant emulsifier  
encapsulants for agrochem. agents)

IT Polymerization

(atom transfer, radical; prepn. of reactive polymeric surfactant  
emulsifier encapsulants for agrochem. agents)

IT Crosslinking

(interfacial; prepn. of reactive polymeric surfactant emulsifier  
encapsulants for agrochem. agents)

IT Encapsulation

(microencapsulation; prepn. of reactive polymeric surfactant emulsifier  
encapsulants for agrochem. agents)

IT Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material  
use); PREP (Preparation); USES (Uses)

(polyoxyalkylene-, graft; prepn. of reactive polymeric surfactant  
emulsifier encapsulants for agrochem. agents)

IT Agrochemicals

Emulsifying agents

Surfactants

(prepn. of reactive polymeric surfactant emulsifier encapsulants for  
agrochem. agents)

IT 366-18-7, 2,2'-Bipyridine 4206-52-4, N-Propyl-2-pyridylmethanimine

RL: CAT (Catalyst use); USES (Uses)

(ATRP **catalyst** ligand; prepn. and crosslinking of reactive  
polymer surfactants for use as emulsion stabilizers and  
micro-encapsulants)

IT 7758-89-6, **Copper** chloride (CuCl) 7787-70-4, **Copper**

bromide (CuBr)

RL: CAT (Catalyst use); USES (Uses)

(ATRP **catalyst**; prepn. and crosslinking of reactive polymer  
surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 119182-44-4P, 2-Hydroxyethyl methacrylate-methyl methacrylate block

copolymer 478813-96-6P



RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (diblock; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 57-48-7D, D-Fructose, polymers, alkyl derivs. 1338-43-8, Span 80 9008-63-3, Morwet D425 104206-82-8, Mesotrione  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (dispersant for internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 9002-89-5, Poly(vinyl alcohol)  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (dispersant; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 79538-32-2, Tefluthrin  
 RL: AGR (Agricultural use); PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); BIOL (Biological study); PROC (Process); USES (Uses)  
 (dispersed internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 7440-50-8, Copper, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (dispersed internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 600-00-0, Ethyl-2-bromoisobutyrate 245070-97-7  
 RL: CAT (Catalyst use); USES (Uses)  
 (initiator; prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 7757-82-6, Sodium sulfate, processes 67306-00-7, Fenpropidin 87392-12-9, s-Metolachlor 91465-08-6, .lambda.-Cyhalothrin 117428-22-5, Picoxystrobin 446255-83-0, Solvesso 200  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); PROC (Process)  
 (internal phase; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 478814-10-7P 478814-11-8P 478814-12-9P 478814-13-0P 478814-14-1P 478814-16-3P 478814-18-5P 478814-19-6P 478814-20-9P  
 RL: AGR (Agricultural use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (microcapsules; prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 478813-84-2P 478813-85-3P 478813-86-4P 478813-87-5P 478813-88-6P 478813-89-7P 478813-91-1P 478813-92-2P 478813-93-3P 478813-94-4P 478813-95-5P 478813-97-7P 478813-98-8P 478813-99-9P 478814-00-5P 478814-01-6P 478932-53-5P  
 RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (prepn. and crosslinking of reactive polymer surfactants for use as emulsion stabilizers and micro-encapsulants)

IT 478814-02-7P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. of crosslinked surfactant emulsifiers at air/water interface to prep. stable emulsions of internal liq. phases)

IT 478814-03-8P 478814-04-9P 478814-05-0P 478814-06-1P 478814-07-2P  
 478814-08-3P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

IT 99821-01-9, Atlas G5000  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)  
 (prepn. of reactive polymeric surfactant emulsifier encapsulants for agrochem. agents)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L16 5 ANSWERS HCAPLUS COPYRIGHT 2003 ACS

IC ICM C08G018-48  
 ICS C08G018-08; C08J009-00

ICI C08L075-04

CC 37-6 (Plastics Manufacture and Processing)

TI Polyurethane foam compositions having improved physical properties

ST polyethylene glycol **sucrose** polyurethane foam; polypropylene glycol glycerin polyurethane foam; flexible polyurethane foam prepn; phys property polyurethane foam; alkali **metal** phosphate polyurethane foam; aluminum ammonium salt polyurethane foam; acid chloride polyurethane foam flexible

IT Urethane **polymers**, miscellaneous  
 RL: MSC (Miscellaneous)  
 (foam **stabilizer**-contg., flexible, with improved phys. properties)

IT Acid chlorides  
 RL: USES (Uses)  
 (foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT Stabilizing agents  
 (foam, polyurethane contg., flexible, with improved phys. properties)

IT Phosphates, uses  
 RL: USES (Uses)  
 (aluminum boro-, foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT Polyphosphoric acids  
 RL: USES (Uses)  
 (aluminum salts, foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT Phosphates, uses  
 RL: USES (Uses)  
 (boro-, foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT Phosphates, uses  
 RL: USES (Uses)  
 (dihydrogen, foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT Carboxylic acids, esters  
 RL: USES (Uses)  
 (esters, foam stabilizers, polyurethane contg., flexible, with improved phys. properties)

IT 7732-18-5, Water, uses  
 RL: USES (Uses)  
 (blowing agents, polyurethane contg., flexible, with improved phys. properties)

IT 57516-88-8 69521-62-6 84631-61-8 150346-95-5  
 RL: USES (Uses)  
 (foam stabilizer-contg., flexible, with improved phys. properties)  
 IT 7558-80-7 7646-93-7 7664-93-9D, Sulfuric acid, alkali **metal**  
 salts 7722-76-1 7778-77-0 7783-28-0 7803-63-6 10043-01-3,  
 Aluminum trisulfate 13453-80-0  
 RL: USES (Uses)  
 (foam stabilizers, polyurethane contg., flexible, with improved phys.  
 properties)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L16 5 ANSWERS HCAPLUS COPYRIGHT 2003 ACS  
 NCL 260397450  
 CC 42 (Steroids)  
 TI 9,11-Dihalo-21-methylsteroids  
 IT Polymerization  
 (of olefins, Al compd.-diisopropylsalicylic acid-V **catalysts**  
 in)  
 IT Mitochondria  
 (phosphorylation (Usually oxidative is meant.) by, **glucose**  
 6-phosphate formation in)  
 IT 1,2-Propanedione, 1-(11.beta.,16.alpha.,17-trihydroxy-3-oxoandrost-4-en-  
 17.beta.-yl)-  
 Ammonium, [2-[(9,11.beta.-dichloro-17-hydroxy-3-oxoandrosta-1,4-dien-  
 17.beta.-yl)carbonyl]ethyl]trimethyl, bromide  
 Ammonium, [2-[(9,11.beta.-dichloro-3.beta.,17-dihydroxyandrost-4-en-  
 17.beta.-yl)carbonyl]ethyl]trimethyl, bromide  
 Ammonium, butyl[2-[(9,11.beta.-dichloro-6.alpha.-fluoro-3.beta.,17-  
 dihydroxyandrost-4-en-17.beta.-yl)carbonyl]ethyl]dimethyl, chloride  
 Ammonium, dibutylethyl[2-[(6.alpha.,9,11.beta.-trichloro-3.beta.,17-  
 dihydroxyandrost-4-en-17.beta.-yl)carbonyl]ethyl], iodide  
 Androst-4-en-3-one, 11.beta.,16.alpha.,17.alpha.-trihydroxy-17-pyrnvoyl-  
 Androst-4-en-3-one, 11.beta.,16.alpha.,17.alpha.-trihydroxy-17-pyrnvoyl-,  
 16-acetate  
 Androst-4-en-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-17-hydroxy-  
 Androst-4-en-3-one, 6.alpha.,9,11.beta.-trichloro-17.alpha.-hydroxy-17-(2-  
 iodopropionyl)-  
 Androst-4-en-3-one, 9,11.beta.-dichloro-16.alpha.,17.alpha.-dihydroxy-17-  
 pyruvoyl-, 16-acetate  
 Androst-4-en-3-one, 9,11.beta.-dichloro-16.alpha.,17.alpha.-dihydroxy-17-  
 pyruvoyl-, 16-acetate  
 Androst-4-en-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-16.alpha.-methyl-  
 17-propionyl-  
 Androst-4-en-3-one, 9,11.beta.-dichloro-6.alpha.-fluoro-17.alpha.-hydroxy-  
 17-(2-iodopropionyl)-  
 Androst-4-en-3-one, 9,11.beta.-dichloro-6.alpha.-fluoro-17.alpha.-hydroxy-  
 17-(2-iodopropionyl)-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 17-acryloyl-6.alpha.,9,11.beta.-  
 trichloro-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 17-acryloyl-9,11.beta.-dichloro-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 17-acryloyl-9,11.beta.-dichloro-  
 16.alpha.-methyl-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 17-acryloyl-9,11.beta.-dichloro-  
 6.alpha.-fluoro-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 17-acryloyl-9-bromo-11.beta.-fluoro-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 6.alpha.,9,11.beta.-trichloro-17-  
 (N,N-dibutyl-.beta.-alanyl)-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 6.alpha.,9,11.beta.-trichloro-17-  
 (N,N-dibutyl-.beta.-alanyl)-, ethiodide

Androst-4-ene-3.beta.,17.alpha.-diol, 9,11.beta.-dichloro-17-(N,N-diethyl-.beta.-alanyl)-16.alpha.-methyl-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 9,11.beta.-dichloro-17-(N,N-dimethyl-.beta.-alanyl)-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 9,11.beta.-dichloro-17-(N,N-dimethyl-.beta.-alanyl)-, methobromide  
 Androst-4-ene-3.beta.,17.alpha.-diol, 9,11.beta.-dichloro-17-(N,N-dimethyl-.beta.-alanyl)-6.alpha.-fluoro-  
 Androst-4-ene-3.beta.,17.alpha.-diol, 9,11.beta.-dichloro-17-(N,N-dimethyl-.beta.-alanyl)-6.alpha.-fluoro-, butochloride  
 Androsta-1,4,6-trien-3-one, 17.beta.-acryloyl-9,11.beta.-dibromo-6-fluoro-17-hydroxy-  
 Androsta-1,4,6-trien-3-one, 9-bromo-6-chloro-11.beta.-fluoro-17.alpha.-hydroxy-17-propionyl-  
 Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-16.alpha.,17.alpha.-(isopropylidenedioxy)-17-lactoyl-  
 Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-17-propionyl-  
 Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.beta.-(N,N-dimethyl-.beta.-alanyl)-17-hydroxy-, methobromidet  
 Androsta-4,9(11)-dien-3-one, 16.alpha.17.alpha.-dihydroxy-17-pyruvoyl-, 16-acetate  
 Pregn-4-ene-3,20-dione, 9-bromo-11.beta.-chloro-17,21-dihydroxy-  
 Pregna-1,4-diene-3,20-dione, 11.beta.,17,21-trihydroxy-(prednisolone), 21-acetate  
 IT Ethylene, 1,1-dichloro-, **homopolymer**  
 (stabilization of, by Ba salts of fatty acids and basic Pb salts of O-contg. acids)  
 IT 1171-81-9, Pregn-4-ene-3,20-dione, 11.beta.,16.alpha.,17,21-tetrahydroxy-  
 1525-89-9, Pregn-4-ene-3,20-dione, 9-bromo-11.beta.-fluoro-17,21-dihydroxy-  
 1766-08-1, 1-Propanone, 1-(9,11.beta.-dichloro-6.alpha.-fluoro-3.beta.,17-dihydroxyandrost-4-en-17.beta.-yl)-3-(dimethylamino)-  
 1827-41-4, Androst-4-en-3-one, 9,11.beta.-dichloro-6.alpha.-fluoro-17.alpha.-hydroxy-17-lactoyl-, 17.beta.-acetate 1895-34-7,  
 Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.beta.-(N,N-dimethyl-.beta.-alanyl)-6.alpha.-fluoro-17-hydroxy- 2249-97-0, Androsta-1,4,6-trien-3-one, 17.beta.-acryloyl-9-bromo-11.beta.-fluoro-17-hydroxy-16.alpha.-methyl-  
 2342-43-0, Androsta-1,4-dien-3-one, 17.beta.-acryloyl-9-chloro-11.beta.-fluoro-17-hydroxy- 2367-58-0, Pregn-4-ene-3,20-dione, 9,11.beta.-dichloro-6.alpha.-fluoro-17-hydroxy-, cyclic 20-(ethylethylene acetal) 2376-24-1, Androst-4-en-3-one, 9,11.beta.-dichloro-6.alpha.-fluoro-17.alpha.-hydroxy-17-propionyl- 2386-12-1, 2-Propen-1-one, 1-(9-bromo-11.beta.-fluoro-3.beta.,17-dihydroxyandrost-4-en-17.beta.-yl)-  
 2546-77-2, Androst-4-en-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-6.alpha.-fluoro-17-hydroxy- 2560-34-1, Androsta-1,4,6-trien-3-one, 9-chloro-11.beta.-fluoro-16.alpha.,17.alpha.-dihydroxy-17-propionyl-  
 2822-35-7, 2-Propen-1-one, 1-(9,11.beta.-dichloro-6.alpha.-fluoro-3.beta.,17-dihydroxyandrost-4-en-17.beta.-yl)- 2837-35-6,  
 Pregn-4-en-20-one, 9,11.beta.-dichloro-6.alpha.-fluoro-3.beta.,17-dihydroxy-, cyclic ethylethylene acetal 2838-63-3, Androsta-1,4-dien-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-6.alpha.-fluoro-17-hydroxy-  
 3822-56-8, Pregn-4-ene-3,20-dione, 9-chloro-11.beta.-fluoro-17,21-dihydroxy- 3836-94-0, Pregn-4-en-20-one, 9,11.beta.-dichloro-6.alpha.-fluoro-3.beta.,17-dihydroxy- 3871-41-8, Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-6.alpha.-fluoro-17.alpha.-hydroxy-17-propionyl-  
 4111-38-0, Androsta-1,4,6-trien-3-one, 9,11.beta.-dibromo-6-fluoro-17.alpha.-hydroxy-17-(2-iodopropionyl)- 7636-94-4, Androsta-1,4,6-trien-3-one, 9-chloro-11.beta.-fluoro-17.alpha.-hydroxy-17-lactoyl-6-methyl-, 17.beta.-acetate 7753-60-8, Pregna-4,9(11)-diene-3,20-dione, 17,21-dihydroxy-, 21-acetate 13914-23-3, Pregn-4-ene-3,20-dione,

9,11.beta.-dichloro-17,21-dihydroxy- 21940-45-4, Pregna-4,6-diene-3,20-dione, 11.beta.,17,21-trihydroxy-, 21-acetate 95159-32-3, Androst-4-en-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-17-(2-iodopropionyl)- 95747-87-8, Androst-4-en-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-17-lactoyl-, 17.beta.-acetate 96061-12-0, Androst-4-en-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-17-propionyl-96112-11-7, Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-17-(2-iodopropionyl)- 96214-01-6, Pregn-4-ene-3,20-dione, 9,11.beta.-dibromo-17,21-dihydroxy- 96215-07-5, Androsta-1,4-dien-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-17-hydroxy- 96266-57-8, Androsta-1,4,6-trien-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-17-hydroxy- 96267-65-1, Androsta-1,4-dien-3-one, 9-bromo-11.beta.-chloro-17.alpha.-hydroxy-16.alpha.-methyl-17-propionyl- 96267-83-3, Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-6.alpha.-methyl-17-propionyl- 96267-84-4, Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.alpha.-hydroxy-16.beta.-methyl-17-propionyl-96267-85-5, Androst-4-en-3-one, 17.beta.-acryloyl-9,11.beta.-dichloro-17-hydroxy-16.alpha.-methyl- 96268-10-9, Androsta-1,4-dien-3-one, 17.beta.-acryloyl-9-bromo-11.beta.-chloro-17-hydroxy-6.alpha.-methyl-96268-14-3, Androsta-1,4,6-trien-3-one, 9,11.beta.,-dibromo-17.alpha.-hydroxy-6-methyl-17-propionyl- 96366-59-5, Pregn-4-en-20-one, 9,11.beta.-dichloro-3.beta.,17-dihydroxy-, cyclic ethylene acetal 96456-40-5, Androsta-1,4-dien-3-one, 6.alpha.,9,11.beta.-trichloro-17.alpha.-hydroxy-17-lactoyl-, 17.beta.-acetate 96466-20-5, Androst-4-en-3-one, 9,11.beta.-dichloro-16.alpha.,17.alpha.-dihydroxy-17-lactoyl-, 16-acetate 97077-84-4, Malonamic acid, N-[3-(dimethylamino)propyl]-2-[(2-hydroxy-1-naphthyl)methylene]-, .delta.-lactone 97082-26-3, Androst-4-en-3-one, 6.alpha.,9,11.beta.-trichloro-17.alpha.-hydroxy-17-lactoyl, 17.beta.-acetate 97114-27-7, Androsta-1,4,6-trien-3-one, 6,9,11.beta.-trichloro-17.beta.- (N,N-dibutyl-.beta.-alanyl)-17-hydroxy-97256-02-5, Androsta-1,4,6-trien-3-one, 9,11.beta.-dichloro-17.beta.- (N,N-diethyl-.beta.-alanyl)-17-hydroxy-16.alpha.-methyl- 97296-69-0, Androst-4-en-3-one, 6.alpha.,9,11.beta.-trichloro-17.alpha.-hydroxy-17-propionyl- 97432-56-9, Androsta-1,4-dien-3-one, 9-bromo-11.beta.-chloro-17.alpha.-hydroxy-17-lactoyl-, 17.beta.-acetate 98422-77-6, Androsta-1,4,6-trien-3-one, 9,11.beta.-dichloro-17.beta.- (N-ethyl-N-methyl-.beta.-alanyl)-17-hydroxy- 98423-84-8, Pregn-4-en-20-one, 6.alpha.,9,11.beta.-trichloro-3.beta.,17-dihydroxy-, cyclic propylene acetal 98424-08-9, Pregn-4-en-20-one, 9,11.beta.-dichloro-3.beta.,17-dihydroxy-16.alpha.-methyl-, cyclic ethylene acetal 100176-88-3, Pregn-4-en-20-one, 9,11.beta.-dichloro-3.beta.,17-dihydroxy-100996-20-1, Androsta-1,4-dien-3-one, 9-bromo-11.beta.-chloro-17.alpha.-hydroxy-17-(2-iodopropionyl)-6.alpha.-methyl- 101034-54-2, 2-Propen-1-one, 1-(9,11.beta.-dichloro-3.beta.,17-dihydroxy-16.alpha.-methylandrost-4-en-17.beta.-yl)- 102030-92-2, Pregn-4-en-20-one, 6.alpha.,9,11.beta.-trichloro-3.beta.,17-dihydroxy- 102291-22-5, 1-Propanone, 1-(9,11.beta.-dichloro-3.beta.,17-dihydroxyandrost-4-en-17.beta.-yl)-3-(dimethylamino)- 103005-17-0, Pregn-4-ene-3,20-dione, 6.alpha.,9,11.beta.-trichloro-17-hydroxy-, cyclic 20-(propylene acetal) 103005-26-1, Androsta-1,4-dien-3-one, 9,11.beta.-dichloro-17.beta.- (N,N-dimethyl-.beta.-alanyl)-17-hydroxy- 103071-92-7, Pregn-4-ene-3,20-dione, 9,11.beta.-dichloro-17-hydroxy-16.alpha.-methyl-, cyclic 20-(ethylene acetal) 103242-66-6, Pregn-4-ene-3,20-dione, 9,11.beta.-dichloro-17-hydroxy-, cyclic 20-(ethylene acetal) 103820-32-2, 1-Propanone, 1-(9,11.beta.-dichloro-3.beta.,17-dihydroxy-16.alpha.-methylandrost-4-en-17.beta.-yl)-3-(diethylamino)- 103936-76-1, 1,2-Propanedione, 1-(11.beta.,16.alpha.,17-trihydroxy-3-oxoandrost-4-en-17.beta.-yl)-, 16-acetate 103937-63-9, Androst-4-en-3-one, 17.beta.-acryloyl-

6.alpha.,9,11.beta.-trichloro-17-hydroxy- 104098-66-0,  
 Pregn-4-en-20-one, 9,11.beta.-dichloro-3.beta.,17-dihydroxy-16.alpha.-  
 methyl- 104098-74-0, 2-Propen-1-one, 1-(9,11.beta.-dichloro-3.beta.,17-  
 dihydroxyandrost-4-en-17.beta.-yl)- 104181-15-9, Androsta-1,4-dien-3-  
 one, 9,11.beta.-dichloro-16.alpha.,17.alpha.-dihydroxy-17-lactoyl-, cyclic  
 16,17-acetal with acetone 104534-29-4, 2-Propen-1-one,  
 1-(6.alpha.,9,11.beta.-trichloro-3.beta.,17-dihydroxyandrost-4-en-17.beta.-  
 yl)- 105106-50-1, 1,2-Propanedione, 1-(9,11.beta.-dichloro-16.alpha.,17-  
 dihydroxy-3-oxoandrost-4-en-17.beta.-yl)-, 16-acetate 106065-37-6,  
 1-Propanone, 3-(dibutylamino)-1-(6.alpha.,9,11.beta.-trichloro-3.beta.,17-  
 dihydroxyandrost-4-en-17.beta.-yl)- 106194-11-0, Androsta-1,4-dien-3-  
 one, 17.beta.-acryloyl-6.alpha.,9,11.beta.-trichloro-17-hydroxy-  
 106714-26-5, 1,2-Propanedione, 1-(16.alpha.,17-dihydroxy-3-oxoandrosta-  
 4,9(11)dien-17.beta.-yl)-, 16-acetate  
 (prepn. of)

IT 221-49-8, 2H-Naphth[2',1':4,5]indeno[1,2-d][1,3]dioxole  
 (steroid derivs.)

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

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IC ICM C07H015-00

CC 44-4 (Industrial Carbohydrates)

Section cross-reference(s): 67

TI **Catalytic** method for modifying **carbohydrates**,  
 alcohols, aldehydes or polyhydroxy compounds

ST **carbohydrate** oxidn **platinum** nanoparticle  
**catalyst**; polyvinylpyrrolidone stabilized **platinum**  
 colloid **catalyst sorbose** oxidn

IT Nanoparticles

Oxidation

Oxidation **catalysts**

(chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal** nanoparticle **catalysts**)

IT Alcohols, processes

Aldehydes, processes

**Carbohydrates**, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal** nanoparticle **catalysts**)

IT Alcohols, processes

RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (polyhydric; chem. conversion of **carbohydrates**, alcs.,  
 aldehydes or polyhydroxy compds. in presence of **polymer-**  
**stabilized metal** nanoparticle **catalysts**)

IT 9003-39-8, Poly(vinylpyrrolidone)

RL: CAT (Catalyst use); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **metal** nanoparticle  
**catalysts** stabilized with)

IT 7440-02-0, **Nickel**, uses 7440-05-3, **Palladium**, uses

7440-16-6, **Rhodium**, uses 7440-18-8, **Ruthenium**, uses

7440-50-8, **Copper**, uses

RL: CAT (Catalyst use); USES (Uses)

(chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized**  
**metal** nanoparticle **catalysts**)

IT 7782-44-7, **Oxygen**, uses

RL: NUU (Other use, unclassified); USES (Uses)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 57-48-7, **Fructose**, processes 58-86-6, **Xylose**,  
 processes 63-42-3, **Lactose** 69-79-4, **Maltose**  
 499-40-1, **Isomaltose** 51411-23-5, **Trehalulose**  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 133634-68-1P 133634-69-2P 150787-99-8P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (chem. conversion of **carbohydrates**, alcs., aldehydes or  
 polyhydroxy compds. in presence of **polymer-stabilized  
 metal nanoparticle catalysts**)

IT 7440-06-4, **Platinum**, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (nanoparticles; chem. conversion of **carbohydrates**, alcs.,  
 aldehydes or polyhydroxy compds. in presence of **polymer-  
 stabilized metal nanoparticle catalysts**)

IT 50-99-7, **Glucose**, reactions 57-50-1, **Saccharose**, reactions  
 87-79-6, **Sorbose**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (oxidn.; chem. conversion of **carbohydrates**, alcs., aldehydes  
 or polyhydroxy compds. in presence of **polymer-  
 stabilized metal nanoparticle catalysts**)

IT 124-22-1, **Dodecylamine**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination of **isomaltulose**; chem. conversion of  
**carbohydrates**, alcs., aldehydes or polyhydroxy compds. in  
 presence of **polymer-stabilized metal  
 nanoparticle catalysts**)

IT 13718-94-0, **Isomaltulose**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reductive amination with dodecylamine; chem. conversion of  
**carbohydrates**, alcs., aldehydes or polyhydroxy compds. in  
 presence of **polymer-stabilized metal  
 nanoparticle catalysts**)

ALL ANSWERS HAVE BEEN SCANNED

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|  |            |         |
|--|------------|---------|
| COST IN U.S. DOLLARS                       | SINCE FILE | TOTAL   |
|  | ENTRY      | SESSION |
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